ISBN 0 646 33549 9

Enquiries:

Media and Publications Officer
Productivity Commission
Locked Bag 2
Collins Street East Post Office
Melbourne VIC 8003

Tel: (03) 9653 2244
Fax: (03) 9653 2303

An appropriate citation for this paper is:

Productivity Commission 1998, *Work Arrangements in Container Stevedoring*, Research Report, AusInfo, Canberra.

Information about the Productivity Commission and its current work program can be found on the World Wide Web at http://www.pc.gov.au

FOREWORD

Stevedoring is a major link in the waterfront chain. Its performance can thus have a significant impact on the efficiency of the traded goods sector and ultimately affects the performance of the economy as a whole.

The 'thinness' and variability of Australian shipping trades creates a particular need for flexible work arrangements at Australia's ports. This study examines selected work arrangements and assesses their implications for the performance of container stevedoring workplaces. The effects on employees and users of stevedoring services are also considered, and impediments to achieving improved work arrangements are analysed.

The study has drawn on detailed information collected throughout 1997 from consultations with industry participants, a public call for views and evidence, discussions at selected workplaces, and workplace information requests. We are grateful to all those who took part. It should be noted that the study does not take account of developments in April 1998 involving Patrick Stevedores, which occurred when it was being finalised.

This is the first in a series of research reports requested by the Government on work arrangements in key industries. It was prepared in the Labour Market Research Branch. It is complemented by the Productivity Commission's report, *International Benchmarking of the Australian Waterfront*, which benchmarks port performance across container, bulk and break bulk trades, and cruise shipping.

The Commission welcomes further feedback on both reports, consistent with its objective to improve the information base on key issues affecting Australia's economic performance and community living standards.

Gary Banks
Acting Chairman
April 1998

CONTENTS

Appendixes

References

ABBREVIATIONS

ABS	Australian Bureau of Statistics
AIRC	Australian Industrial Relations Commission
AMOU	Australian Maritime Officers' Union
AVT	Australian vocational trainee
BHP	Broken Hill Propriety Ltd
BIE	Bureau of Industry Economics
BTCE	Bureau of Transport and Communications Economics
CEPU	Communications, Electrical, Electronic, Energy, Information, Postal, Plumbing and Allied Services Union of Australia
CTAL	Container Terminals Australia Limited
IC	Industry Commission
ISC	Inter-State Commission
ITF	International Transport Federation
MTIA	Metal Trades Industry Association
MUA	Maritime Union of Australia
PC	Productivity Commission
P&O	Pacific and Orient
TEU	20-foot equivalent unit
WIRA	Waterfront Industry Reform Authority
WWF	Waterside Workers Federation

GLOSSARY

Australian vocational trainee	An employee who is part of a national training scheme (the Australian Vocational Training System) administered by the Australian National Training Authority. These trainees are employed by stevedores under the *Stevedoring Australian Vocational Training System Award 1994*
Break bulk cargo	Non-bulk cargo that is not containerised. It can include unitised cargoes as well as miscellaneous goods in boxes, bales, cases or drums — for example, assembled cars, steel coil and timber
Bulk cargo	Cargo (such as coal, mineral ores, oil or wheat) that is carried loose, taking up the shape of the ship's hold. It is handled by direct application of conveyors, grabs, pumps, and elevators
Casual employee	An employee engaged on a daily basis without any commitment by the employer on the period of engagement
Clerks	Operational employees who perform tasks associated with tracking the movement of containers into, within and out of the terminal and other clerical tasks
Common user	Port facilities, including berths and equipment such as straddle carriers and cranes, that can be used by a number of stevedores that have a contract with the port company
Container	Standardised steel boxes (20 feet or 40 feet long and 8 feet wide and high) used to carry cargo
Container terminal	The wharf and adjoining area where containers are loaded and unloaded from vessels

Continuous work shift	A work arrangement where equipment is operated through rest breaks. Gang members are allotted to staggered rest breaks so that at any time during the shift there is always a sufficient number of employees to continue operating the equipment
Double header	Two consecutively worked shifts, usually worked from day to evening shift
Down driver	A driver not currently operating a crane or other heavy equipment who may either be on a rest break or performing other duties
Elapsed rate	The number of containers moved per ship per elapsed hour. Elapsed time is the total hours over which the ship is worked, measured from labour on to labour off
Employee	A person employed by a container stevedore, including management, supervisors and operational employees
Enterprise agreement	An agreement at an individual workplace between the employer and workers (usually represented by their union) on terms and conditions of employment
Enterprise employment	An employment relationship between workers and a stevedoring workplace
Failure to report	When an employee does not report for the commencement or resumption of a shift or shift extension
Foreman	An operational employee who, in consultation with supervisors, supervises the work of other operational employees in the working of ships and receival and delivery operations
Guaranteed wage employee	An employee engaged by a stevedoring firm on a permanent part-time basis, but only guaranteed to be paid for a minimum number of hours per week. Guaranteed wage employees are entitled to other conditions of service on a pro-rata basis

Idle time payment	Payment to operational employees for full shifts during which they must be available but are not required for work
Industrial dispute	A withdrawal from work by a number of employees or a refusal by an employer or a number of employers to permit some or all of their employees to work
Internal transfer vehicle	A truck with trailer which is used to transport containers between the crane and the yard
Irregular shift	That part of the roster where employees may be assigned to any shift on a day-to-day basis
Lashing duties	Manoeuvring heavy 12-foot rods which lock containers onto the ship's deck to prevent containers from dislodging while the ship is at sea
Maintenance employee	An operational employee who works in maintenance operations at a stevedoring workplace. Usually, the employee holds a mechanical or electrical trade certificate
Management	Managerial employees at the workplace, excluding supervisory employees
Manning levels	The number of persons employed at a stevedoring workplace
Manning scales	The number of workers per gang required to perform defined tasks (such as operating heavy equipment or performing lashing duties)
Nick, the	The practice of employees leaving the terminal before the end of the shift while still being paid for the full shift
Nonmanagerial employees	Supervisory employees and operational employees
Operational employees	All employees in grades 1 to 6 and Australian vocational trainees. Excludes supervisors and management. Operational employees are involved in tasks including operating machinery, clerical work, maintenance and lashing

Order of engagement	An arrangement which specifies the order in which employees are engaged for a shift (also known as the 'order of pick')
Permanent employee	An employee engaged by a stevedoring firm on a full-time continuing basis. They are entitled to an average of 35 ordinary hours of work per week, annual leave, sick leave, long service leave, rostered time off and other conditions
Port authority	Public agency responsible for the control and management of a port and its facilities
Productivity Employment Programme	A productivity-based remuneration and employment arrangement implemented at CTAL Sydney
Quay crane	A shore-based crane used to move containers on and off ships
Reefer	Refrigerated container
Rubber-tyred gantry	A mobile vehicle similar to a straddle carrier which is used to move containers between road and rail transport and yard storage areas
Shipper	A person or enterprise having a commercial arrangement with a shipping organisation for the shipment of cargo. A shipper is the sender or final receiver of cargo
Ship planner	An employee primarily responsible for planning the placement of containers on ships that need to be loaded and unloaded
Ship turnaround time	The time between a vessel mooring to labour off. It may also be measured as the time between a ship entering port and leaving port
Site Committee	A committee of Maritime Union of Australia representatives at each workplace, elected by employees
Smoko	A rest break during a shift (usually 20 minutes in duration)
Stevedore	A company or terminal operator that engages in

	stevedoring
Stevedoring	The loading and unloading of ships' cargoes
Stevedoring industry	Includes bulk, break bulk and container operations
Straddle carrier	A vehicle used to move containers between yard storage areas and the quay crane or land transport
Supervisor	An employee who has overall responsibility for the working of a ship
Supplementary employee	An employee engaged by a stevedoring firm on a non-permanent basis. Supplementary employees are generally paid at the shift rate being worked, plus 20 per cent
20-foot equivalent unit	Container counting unit based on the International Standards Organisation 20-foot by 8-foot container
Variably rostered shift	A shift where operational employees may be assigned to one of two shift types
Wharfie	Operational employee
Workplace	A company-operated worksite where container stevedoring functions are performed
Yard planner	An employee primarily responsible for receiving information from the truck booking system on which containers are being delivered or picked up by trucks or rail

KEY FINDINGS

- Flexibility in the allocation and use of labour is critical to stevedore workplace performance, given the highly variable demand for stevedoring services at Australian ports.
- The container stevedoring industry is characterised by a system of complex, inflexible and prescriptive work arrangements which constrain workplace performance. They impede productivity, reduce timeliness and reliability, and increase labour costs.
- The most significant of these work arrangements are the order of engagement (specifying the order in which different types of employees are engaged for a shift), shift premiums and penalty rates, and redundancy provisions.
- The order of engagement, in combination with relatively high shift premiums and penalty rates, add significantly to total labour costs for a given level of activity. They detract from productivity by creating incentives for permanent operational employees to seek overtime and lead to poor timeliness and reliability. They can also have deleterious effects on the lives of operational employees.
- The high cost of redundancies restricts the ability of stevedores to adjust manning levels of permanent employees. The redundancy agreements also foster skill mismatches and reduce the ability of management to allocate the best person for the job.
- There are a number of factors which impede change, including an adversarial workplace culture, strong union bargaining power, limited competition in the labour market for operational stevedoring employees, and limitations on competition in the industry.
- The *Workplace Relations Act* 1996 facilitates change by enabling work arrangements to be determined primarily at the workplace level. Together with the secondary boycott revisions to the Trade Practices Act, it has also reduced some sources of union bargaining power.
- Responsibility for better outcomes ultimately rests with managers and their employees. Greater competition in container stevedoring would increase the pressures on both sides to change work arrangements and improve performance.

OVERVIEW

The effects of stevedoring work arrangements on workplace performance are examined.

This study examines selected stevedoring work arrangements and assesses their implications for workplace performance. The impact on employees and users of stevedoring services is also considered, and impediments to improving work arrangements are analysed.

Work arrangements are defined broadly

Work arrangements are defined broadly to include the way in which stevedoring work is performed and the conditions attached to that work. They include arrangements specified in the *Stevedoring Industry Award 1991* and enterprise agreements, as well as those that have evolved through custom and practice.

... and the direction and broad magnitude of their effects on performance are assessed.

While the direct effects of some work arrangements may be measurable, for others it is only possible to assess the direction and broad magnitude of their effects on workplace performance. Many other factors also affect stevedore performance, including throughput levels and difficult stows. Moreover, it is difficult to quantify the effects of changing a single work arrangement, because often it is the combination of several work arrangements that constrains workplace performance.

This study focuses on container terminals

The scope of this study is confined to stevedoring services in container terminal operations. Workplace arrangements are discussed in terms of their effects on productivity, reliability, timeliness and cost.

... and uses new information.

This study, with its emphasis on understanding the complexities of work arrangements and their interactions at the workplace, differs from previous studies of the Australian waterfront. It uses a considerable amount of information not previously collated and analysed. The study approach and scope are outlined in box 1.

It is complemented by the Commission's International Benchmarking report.

The study is complemented by the Productivity Commission's report on *International Benchmarking of the Australian Waterfront*, which benchmarks performance across container, bulk and break bulk trades, and cruise shipping. The report compares charges and service quality for stevedoring, port infrastructure and marine services.

Box 1: Scope and approach of the study

Scope

This study focuses on a range of work arrangements at selected container stevedoring workplaces. Container stevedoring services account for around one third of waterfront charges. Labour accounts for over half of the container stevedoring operating costs.

Data collection methods

A number of methods were used to collect qualitative and quantitative data from primary sources including: initial consultations with industry participants (stevedores and unions) and other parties; a public call for views and information; detailed discussions at selected workplaces with managers, supervisors and site committees; and workplace information requests.

Selection of work arrangements

The selection of particular work arrangements for closer analysis was iterative. Work arrangements were first selected on the basis of initial consultations and analysis of the Stevedoring Industry Award, enterprise agreements and secondary sources. Specific work arrangements were finalised following the detailed discussions at the chosen workplaces.

Selection of workplaces

Five Australian container workplaces were selected for detailed analysis: Sea-Land (Port Adelaide); CTAL (Port Botany, Sydney); P&O Ports (Port Melbourne); Patrick (Port Melbourne); and Patrick (Fisherman Islands, Brisbane). Together they account for around three quarters of the annual throughput handled by major container terminals.

Fergusson Terminal, Ports of Auckland, New Zealand was chosen for international comparison because: its annual throughput falls within the range of that handled by the Australian workplaces selected; New Zealand and Australia have broadly similar cultures and living standards; extensive reforms have occurred in New Zealand; and initial consultations indicated that work arrangements at New Zealand terminals differed significantly from those at Australian terminals.

Box 2: Some key terms

Manning levels	The number of persons employed at a stevedoring workplace.
Manning scales	The number of workers per gang required to perform defined tasks (such as operating heavy equipment or performing lashing duties).
Operational employees	All employees in grades 1 to 6 and Australian vocational trainees. It excludes supervisors and management. Operational employees are involved in tasks including operating machinery, clerical work, maintenance and lashing.
Permanent employees	Employees engaged by a stevedoring firm on a full-time continuing basis. They are entitled to an average of 35 ordinary hours of work per week, annual leave, sick leave, long service leave, rostered time off and other conditions.
Guaranteed wage employees	Employees engaged by a stevedoring firm on a permanent part-time basis, but only guaranteed to be paid for a minimum number of hours per week. Guaranteed wage employees are entitled to other conditions of service on a pro-rata basis.
Supplementary employees	Employees engaged by a stevedoring firm on a non-permanent basis. Supplementary employees are generally paid at the shift rate being worked, plus 20 per cent.

Stevedoring and waterfront performance

Stevedoring is an important part in the waterfront chain.

The waterfront provides a critical link in the distribution of traded goods internationally and within Australia. Stevedoring, the loading and unloading of cargo from ship to shore, is an important part of the waterfront chain.

There is significant scope for further improvement.

International benchmarking by the Productivity Commission and other studies indicate that performance of Australian container stevedores remains significantly below that of many overseas operations, despite having improved both during and since the waterfront industry reform process (1989–92).

Poor performance imposes direct and indirect costs.

Poor performance in stevedoring imposes both direct and indirect costs on users of stevedoring services and the rest of the economy. Berthing delays, for example, can cost shipping lines about $30 000 per day for a ship with a 2000 TEU (20-foot equivalent unit containers) capacity. Examples of indirect costs include maintenance of higher than normal inventory levels, loss of confidence by overseas buyers and discouragement of investment throughout the economy. Moreover, inefficiencies in stevedoring weaken the capacity of other links in the distribution chain to perform to their potential.

Demand for stevedoring services is highly variable.

Demand for stevedoring services and labour requirements is highly variable, due to:

- fluctuations in the number and type of ships arriving at any one time;
- variations in the number of containers to be loaded and unloaded; and
- unexpected factors, such as delayed arrivals and difficult stows.

This variability is particularly pronounced at Australian ports because of the ‘thinness’ of shipping trades (low volumes over long distances) and the need for ships to make multi-port calls.

These features mean that labour flexibility is critical to performance.

Given these characteristics, flexibility in the allocation and use of labour is critical to stevedore workplace performance in Australia.

Impact of work arrangements

A system of complex and prescriptive work arrangements constrains container stevedoring workplace performance.

The container stevedoring industry is characterised by a system of complex, inflexible and prescriptive work arrangements which constrain workplace performance. They reduce and distort incentives to improve productivity, reduce timeliness and reliability, and increase labour costs for a given level of activity.

Most work arrangements have been incorporated in enterprise agreements.

The Stevedoring Industry Award provides the structural base for the development of work arrangements in enterprise agreements. However, work arrangements negotiated during and since the waterfront industry reform process have usually been incorporated into enterprise agreements examined. These agreements were made prior to the enactment of the *Workplace Relations Act 1996*.

There have been some improvements

As a result of enterprise bargaining and the waterfront reform process there have been some improvements in work arrangements, including some use of supplementary employees at major ports, lower manning scales, earnings equalised over longer periods, and more efficient use of down drivers (a driver not currently operating equipment).

... but many existing work arrangements constrain performance. The most significant are:

However, many existing work arrangements provide inappropriate incentive structures, inhibit workplace flexibility and constrain the ability of workplaces to adapt to changes in industry conditions. Three work arrangements of particular significance are the order of engagement, shift premiums and penalty rates, and redundancy provisions.

... the order of engagement;

The order of engagement (also known as the 'order of pick') specifies the order in which different types of employees are engaged for a shift. The order of engagement is prescribed in enterprise agreements (see box 3 for a typical example). There is little

variation among the workplaces, with the exception of CTAL Sydney.

Box 3: Weekday order of engagement, Patrick Melbourne, 1996

1st pick	Regularly rostered permanent employees (evening, day)
2nd pick	Variably rostered permanent employees (midnight/irregular, evening/day, day/evening)
3rd pick	Irregularly rostered permanent employees (normal order of allocation: midnight, evening, day)
4th pick	Guaranteed wage employees to limit of guarantee[a]
5th pick	Permanent employees working double headers[b] (limited to two non-consecutive days per week)
6th pick	Guaranteed wage employees beyond guarantee[a]
7th pick	Supplementary employees
8th pick	Permanent employees working additional double headers
9th pick	Guaranteed wage employees and supplementary employees working double headers

a Guaranteed wage employees are guaranteed a minimum of 15 hours work a week.

b Two consecutively worked shifts.

Source: Patrick Melbourne Enterprise Agreement (1996)

The order of engagement constrains management's ability to make the most effective use of the workforce, thereby reducing productivity and, in turn, timeliness and reliability.

In particular, at most workplaces, management cannot use supplementary employees until permanent employees have been given the option of working 'double headers' (two shifts worked consecutively). This increases the access of permanent employees to high levels of overtime. The resulting longer hours can also adversely affect the health and safety of employees. Stevedoring has the highest cost of work related injuries per employee of all major industries.

Further, by restricting the amount of time that supplementary employees are able to work, the order of engagement limits their ability to increase their skills and income. This arrangement also adds to the administrative complexity of the rostering system.

... shift premiums and penalty rates;

Shift premiums and penalty rates are higher than for employees under other relevant awards.[1] For example, the Stevedoring Industry Award specifies that a weekday night shift must be paid at twice the ordinary rate, whereas this shift is paid at a rate of 1.5 or 1.3 in other awards examined.

The order of engagement, in combination with relatively high shift premiums and penalty rates, add significantly to total labour costs. They also detract from productivity by creating incentives for permanent operational employees to seek overtime and lead to poorer timeliness and reliability.

Australian Bureau of Statistics data indicate that, in 1996, stevedoring operational employees on average were paid for 36 hours of ordinary time and nine hours of overtime per week. However, the average hours actually worked would be significantly lower than paid hours because of payments made for idle and call-up time and various forms of leave. These averages also conceal considerable week to week variation within a roster cycle — total hours of work attended can vary from zero to 60 or more. Such work patterns not only impact on labour productivity, but can also have deleterious effects on the lives of operational employees.

Average annual gross earnings of operational employees at the Australian container stevedoring workplaces examined were in the range of $60 000 to $100 000 in the last financial year, with overtime contributing around 20 to 30 per cent. This places these operational employees in the top 5 per cent of Australian wage and salary earners.

[1] *National Building and Construction Award 1990, Transport Workers Award 1983, Storage Services — General — Interim Award 1990, Metal Industry Award 1984*.

... and redundancy provisions.

Retirement and redundancy agreements (incorporating identical entitlements at the workplaces examined) have the potential to impose high redundancy costs on stevedores, particularly when substantial numbers of surplus employees are involved. Patrick The Australian Stevedore recently estimated that the average redundancy payment was $73 000 for Maritime Union of Australia members and $190 000 for Australian Maritime Officers' Union members. Redundancy payments are substantial even for employees with short periods of service. For example, an employee (any age under 60) with three years service would be entitled to 78 weeks pay.

Entitlements specified in the retirement and redundancy agreements markedly exceed those in other awards examined.

The high cost of redundancies restricts the ability of stevedores to adjust manning levels of permanent employees. Industrial disputation is a significant further deterrent to initiating redundancies. The cost of redundancy and the possibility of industrial disputation contribute to retention of surplus labour, thus lowering productivity, and can also inhibit recruitment.

The agreements also foster skill mismatches and reduce the ability of management to allocate the best person for the job. For example, management at several workplaces noted that some clerks, when made surplus by the introduction of the computerised vehicle booking system, were retrained and redeployed to perform other tasks such as straddle carrier driving, because it was less costly than offering them redundancy packages. However, in terms of labour productivity, it may have been more efficient if the clerks had been given redundancy packages and people with the best skills and aptitude for operational areas were employed instead.

Other work arrangements which constrain performance are:

There are several other work arrangements which also impact on container stevedoring workplace performance. These are described in turn.

... the prescribed workforce size and composition;

Workforce size and composition (that is, number by grade and/or function) are prescribed in extensive detail in the enterprise agreements examined in this study. These highly prescriptive arrangements constrain the ability of management to alter manning levels and composition to meet operational requirements, as well as contributing to higher manning levels of permanent employees (see box 4 for a typical example).

Box 4: Workforce size and composition, P&O Ports Melbourne

The enterprise agreement of P&O Ports Melbourne prescribes the size and composition of the permanent operational workforce. The following table shows the number of permanent employees by grade and function in the operational area (excluding maintenance). The agreement also prescribes the number of permanent maintenance employees by grade and function (chapter 5).

	Grade				
	3	4	5	6	Total
Foremen			16	18	34
Clerks		32	3	5	40
Operations Head Clerks				5	5
Operations Clerks		30			30
Allocators			3		3
Payroll Clerks		2			2
General	110		32		142
Key Crane Operators			32		32
Straddle Drivers	76				76
General Duties etc	24				24
Support Services etc	10				10
Reefer Attendants			10		10
Watchmen	5				5
Total Operational (excluding maintenance employees)					231

Source: P&O Ports Melbourne Enterprise Agreement 1996

The enterprise agreements include provisions to adjust workforce size and composition under certain circumstances, but such changes must be negotiated with the union.

... equalisation schemes;

The objective of equalisation schemes is to equalise earnings across permanent operational employees within functional areas by ensuring they have equal access to shifts which pay above the normal shift rate. From the perspective of employees, by equalising earnings opportunities, these schemes can promote the morale and motivation of the permanent workforce. However, depending on the length of the period over which schemes are equalised, such schemes can have a negative impact on productivity and timeliness by restricting management's ability to allocate the appropriate employees to particular shifts and tasks. The schemes may also diminish incentives for permanent operational employees to improve their individual work performance.

The practical application of such schemes has improved in recent times, as the period over which earnings are equalised has been extended. Several workplaces now equalise over a period of 12 months, although some still equalise over a considerably shorter period.

Nevertheless, combined with equalisation schemes, the order of engagement assures access by permanent employees to overtime and reduces work allocated to supplementary employees. This ultimately impacts on productivity and costs.

... existing productivity schemes;

The primary objective of productivity schemes, such as bonuses based on the number of containers lifted, is to increase incentives to work more efficiently. In practice, these schemes do not appear to have been very effective.

At the workplaces examined, productivity bonuses are not targeted at individual employees. Instead,

bonuses are equalised across the workforce. Thus individual employees can have only a minor influence on their productivity bonus.

In addition, for many operational employees the potential earnings from overtime continue to outweigh those from productivity bonuses. Although there is some variation across workplaces, overtime usually accounts for 20 to 30 per cent of gross earnings, which can be several times greater than earnings from productivity bonuses.

... aggregate wage schemes;

Under aggregate wage schemes, yearly gross wages are based on a prescribed set of ordinary, premium and, in some cases, penalty hours. They are paid as an average weekly wage. These schemes can reduce incentives to undertake overtime but, in practice, have served to lock in high labour costs.

... leave provisions;

Leave provisions include annual leave, sick leave and long service leave, as well as rostered weeks and days off. Most of these provisions exceed those that apply to workers under the other awards examined, and can have a significant effect on labour costs. For example, permanent operational employees receive five weeks annual leave under the Stevedoring Industry Award, compared with four weeks for employees under other awards. Further, a loading of 27.5 per cent applies to long service leave for permanent stevedoring employees, whereas no such loading is payable in the other awards examined.

The existing leave provisions contribute to the need to maintain a higher number of permanent employees, given the prescribed composition of the workforce and the order of engagement.

... limits on contracting out;

Good management practice would normally involve a case by case assessment of the viability of contracting out, by comparing the benefits and costs of alternative providers. However, provisions in the enterprise agreements at the Australian workplaces examined limit the extent of contracting out. Some

also specify that contracting out should not reduce the size of the permanent workforce. These restrictions, by precluding access to potential efficiencies, are likely to detract from workplace performance.

There is limited contracting out at the Australian stevedore workplaces examined. All workplaces contract out building maintenance and major linemarking work. Only a few also contract out office cleaning, work area cleaning, refrigerated container monitoring and the truck booking system. Apart from occasional specialised outsourcing, there is no regular use of contractors in the maintenance of equipment.

Unlike Australian stevedoring workplaces, there are no prescribed restrictions on contracting out at the New Zealand stevedoring workplaces examined. Management has the choice of contracting out if it wishes. The ability to contract out increases pressure on permanent employees to be competitive with contractors, thereby improving workplace performance.

... and call-up and idle time provisions in combination with notification requirements.

Call-up payments are made to operational employees for attending work to commence an allocated shift for which they are then not required.

Idle time payments occur when permanent operational employees are rostered on for a shift, but are not allocated to undertake the shift and do not attend the workplace. They are not available to supplementary employees.

Such payments reduce uncertainty of earnings due to the variable nature of containerised stevedoring. However, call-up and idle time payments, when combined with notification rules, can create additional costs, particularly for weekend shifts.

These work arrangements interact to form a system which retards container stevedoring performance

The broad effects of each of these work arrangements on container stevedoring workplace performance are depicted in summary form in table 1. Many (such as the order of engagement, shift premiums and penalty rates, and redundancy provisions) are mutually reinforcing, interacting to form a system which further constrains performance.

These work arrangements create both the opportunity and the incentive for permanent employees to work longer hours to obtain high levels of overtime. They also constrain the ability of management to alter the size and composition of the workforce and choose the most appropriate employees for a particular task.

The outcome is reduced levels of productivity, poor timeliness and reliability, and high labour costs.

... and they have wider effects.

The impact of work arrangements on stevedore performance is felt more widely than in the stevedoring industry alone. Increased costs and reduced service quality can lower output and employment in other industries that rely on the efficient distribution of their products, and ultimately impact on national economic performance and standards of living.

They are less flexible than in New Zealand where extensive reform has occurred.

Work arrangements in New Zealand container stevedoring workplaces are considerably more flexible than in Australia. For example, rostering arrangements and the ratio of permanent to casual labour vary considerably across workplaces, whereas they are relatively uniform across the Australian container stevedoring workplaces examined.

New Zealand's extensive port, labour market and transport reforms over the past decade increased competitive pressures within and between ports, which, in turn, drove improvements in work arrangements. These reforms have resulted in much improved stevedore performance.

Table 1: Summary of the key direct[a] effects of individual work arrangements on performance

Stevedoring work arrangement	*Key effects of work arrangements on performance*	*Productivity* [b]	*Labour costs*	*Timeliness and reliability*
Order of engagement	Constrains the use of supplementary employees and the most appropriate use of labour	↓	↑	↓
	Encourages high levels of overtime	↓	↑	↓
Relatively high shift premiums and penalties	Create large price differentials for different shifts	–	↑	–
	Provide incentives to seek overtime	↓	↑	↓
Relatively high redundancy payments	Maintain higher manning levels	↓	↑	–
	Reduce incentives to recruit employees with appropriate skills	↓	?	↓
Prescribed workforce size and composition	Reduces flexibility to alter the size and skill composition of the workforce when demand varies	↓	↑	–
Equalisation schemes	Can decrease ability to allocate appropriate labour to tasks	↓	–	↓
	Can distort incentives to improve performance	↓	–	↓
Existing productivity schemes	Generally outweighed by overtime incentives	↑	?	↑
Aggregate wage schemes	Reduce incentives to undertake overtime	↑	↓	↑
	Can lock in high premiums and penalties	–	↑	–
Relatively high leave and rostered time off provisions	Increase the absence of permanent operational employees from the workplace and increase manning levels	↓	↑	–
Constraints on contracting out	Reduce pressures on permanent employees to be competitive with contractors	↓	↑	↓
Minimum call-up and idle time	Can create extra costs when combined with notification requirements on weekends	–	↑	–

– Little or no effect; ↓ Decrease; ↑ Increase; ? Direction uncertain.

a Direct effects exclude the effects that arise only from interactions with other work arrangements.

b Productivity refers broadly to indicators such as: output divided by employment; and crane rates.

Enabling change

Why do unproductive work arrangements persist?

Responsibility for changing work arrangements ultimately rests with stevedoring managers and employees. Management and employees (represented by unions) in container stevedoring have negotiated and agreed to these arrangements. The outcomes reflect the attitudes and abilities of the parties involved, their relative bargaining power and the incentives and disincentives for change.

Impediments to changing work arrangements include:

There are a number of factors which impede change to work arrangements, including an adversarial workplace culture, strong union bargaining power and limitations on competition in the industry.

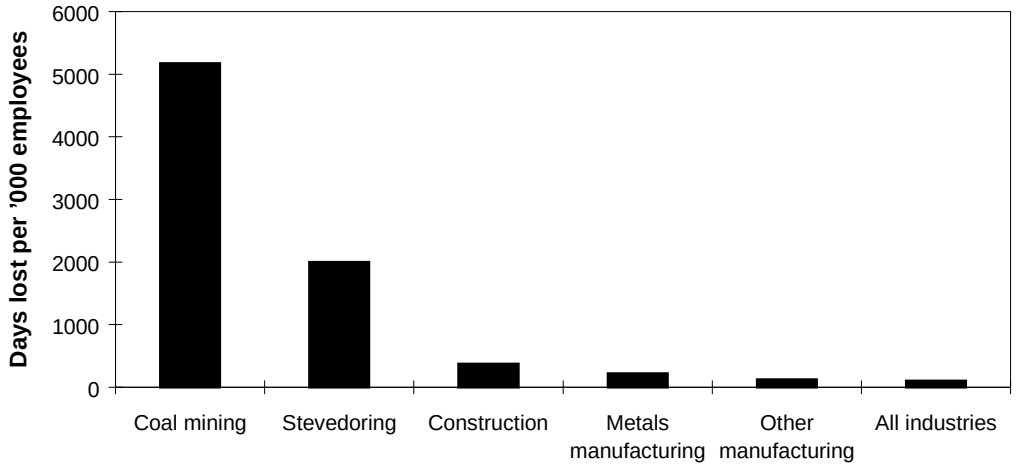
... a workplace culture characterised by a high level of disputation between employers and employees;

Adversarial relations between management and employees pervade most of the Australian container stevedoring workplaces examined. The level of industrial disputation remains high relative to other industries. Stevedoring experienced the second highest annual average number of days lost between 1992–97, after coal mining (figure 1).

... substantial employee bargaining power;

An important source of employee bargaining power, in addition to the extensive coverage of operational employees by the Maritime Union of Australia, is the high cost of berthing delays or stoppages. The shipping lines exert pressure on stevedores to settle disputes quickly, including through penalty clauses and shifting business elsewhere. The Maritime Union of Australia has used its power in this situation to deliver favourable terms and conditions of employment to its members.

Figure 1: Average level of industrial disputes in selected industries, 1992–97 (working days lost per '000 employees)



a The number of working days lost is from ABS 1997a. Employment in 1992 and 1993 uses industry statistics collected by the Waterfront Industry Reform Authority. Productivity Commission estimates of employment for each year over the period 1994 to 1997 assumes a fixed intake per year to reach employment levels in 1997. Estimates of employment in the stevedoring industry include full-time, part-time and supplementary employees working in container, break bulk and bulk operations.

Sources: ABS (1997a); BTCE (1995a); unpublished ABS data; workplace information requests

... limited competition in the labour market for operational stevedoring employees;

The high cost of redundancy payments makes it difficult to reduce the number of excess employees if contracts are lost. These costs also make stevedores reluctant to dismiss poorly performing employees, so reducing competition for jobs and the incentive for employees to improve their performance. Employee turnover in container stevedoring remains very low compared with other industries.

... important constraints on competition within the industry;

Container stevedoring is characterised by a high concentration of ownership and considerable barriers to entry. Constraints on competition enable the cost of inefficiency to be more easily passed on to users of stevedore services, such as shipping lines, exporters and importers. The main barrier to entry is the exclusive, long-term leasing arrangements that stevedores currently have in place with Australian port authorities (table 2).

Table 2: Length of container terminal leases at the ports of Sydney and Melbourne

Lessee	*Commencement year of lease*	*Length of lease*	*Additional years if option to renew lease is taken up*
Patrick Sydney	1978	40 years[a]	5 years
CTAL Sydney	1979	25 years	5 years
Patrick Melbourne	1993	21 years	21 years
P&O Ports Melbourne	1993	20 years	20 years

a Recently renegotiated and increased from 25 years by the stevedore — on the basis of additional capital expenditure of approximately $100 million in the short term.

Sources: Melbourne Ports Corporation; Sydney Ports Corporation

Stevedores in New Zealand face lower barriers to entry, partly because common user facilities — where wharf facilities can be used by a number of stevedores — are available at several ports. Australian interport competition is also limited by the large distances between ports and by the relatively high cost of land transport.

... and indirect contractual relationships.

The shipping lines are the only users of container stevedoring services that have a direct contractual relationship with the stevedore. Other users, such as exporters, importers, road and rail transport companies, have no direct market mechanisms with which to influence stevedore performance. The interest of the shipping lines is for ships to be loaded and unloaded quickly. Shipping lines are less concerned with other costs of delay in the movement of cargo.

Improved industrial relations framework

Most enterprise agreements pre-date the enactment of the Workplace Relations Act.

Enterprise agreements in the Australian workplaces examined were negotiated in 1996, prior to the enactment of the Workplace Relations Act.

The major objective of the Act is to encourage negotiation of work arrangements at the workplace level.	The main objective of the Workplace Relations Act is to provide a framework for cooperative workplace relations by, among other means, ensuring that the primary responsibility for determining matters affecting the relationship between employers and employees rests with those parties at the workplace level.
Provisions in the Workplace Relations Act that affect stevedoring include:	There are several important parts of the Act that affect the negotiation and organisation of work arrangements.
... the 'no-disadvantage' test;	Provisions in the Act require that a workplace agreement not reduce the overall terms and conditions of employees compared with the relevant award. From July 1998, only allowable matters (defined in the Workplace Relations Act) in awards will be considered when the 'no-disadvantage test' is applied to all agreements.
... award simplification;	Some provisions of the Stevedoring Industry Award, such as provisions for right-of-entry and stop work meetings, appear to fall outside the scope of allowable award matters under the Act. Moreover, some work arrangements, such as the order of engagement and equalisation, are not in the Stevedoring Industry Award. As nonallowable matters may still be included in workplace agreements, the relative bargaining power of the two parties will continue to influence the outcome.
... the role of third parties;	The role of external parties has changed under the Workplace Relations Act compared to the previous industrial relations legislation. The scope of awards, for example, has become limited to that of a safety net, with additional matters to be determined at the workplace. This effectively reduces the role of the Australian Industrial Relations Commission in workplace negotiations. The Act also makes provision for individual workplace agreements. However, the Maritime Union of Australia's

extensive coverage of operational employees and its strong preference for collective agreements had led to only collective agreements being negotiated at the workplaces examined.

... and dispute settlement provisions.

The Workplace Relations Act and changes to the *Trade Practices Act 1974* introduced provisions that allow for sanctions on employees and unions engaging in certain types of industrial action. In particular, the reintroduction of the secondary boycott provisions (under the Trade Practices Act) has reduced one source of the Maritime Union of Australia's bargaining power.

The Workplace Relations Act facilitates change to work arrangements, but greater competition is also important.

While the Workplace Relations Act facilitates change to work arrangements, responsibility for better outcomes ultimately rests with managers and their employees. Greater competition in container stevedoring would increase the pressures on both sides to change work arrangements and improve performance.

1 ABOUT THIS STUDY

This study examines selected work arrangements in container stevedoring and assesses their implications for workplace performance. The impact on employees and users of stevedoring services is also considered, and impediments to achieving improved work arrangements are analysed.

This is the first in a series requested by the Government on work arrangements in key sectors of the economy. The study is complemented by an international benchmarking study of the waterfront by the Productivity Commission (PC 1998), which measures the performance of Australian waterfront industries relative to that of other countries. The focus in that report is on the charges and level of service to ship operators, exporters and importers, as well as productivity performance.

Stevedoring is an important part of the waterfront chain of services. The waterfront, the interface between sea and land transport, is critical to Australia's overseas and domestic trade. Three quarters of the value of Australia's imports and exports, and nearly one third of the domestic transport task,[1] are carried by sea (PC 1998; BIE 1995a). Thus, the efficiency with which the different parts of the chain operate affects all parts of the economy, and ultimately community living standards.

Stevedoring services are critical because they influence both the cost and timeliness of the transport of imported and exported goods. Container stevedoring services are a significant component of charges on the waterfront (estimated to be around one third by the Bureau of Transport and Communications Economics (BTCE)).[2] Labour, in turn, accounts for over half of the terminal operating costs of container stevedoring services.[3]

---

1 Measured in terms of net tonne kilometres.

2 This includes charges imposed for other waterfront services such as custom brokerage, pilotage, harbour dues and road transport related services. The BTCE estimated that the average cost of moving an import container across the waterfront in the first half of 1997 was about $655. The average cost for an export container was about $595, reflecting a simpler clearance process for exports (BIE 1995b, p. 15; BTCE 1997a, p. 9).

3 Terminal operating costs include labour costs, capital depreciation, rent and other property costs, equipment maintenance and hire, electricity and management, administration and marketing. Estimates based on data provided by the Australian stevedoring workplaces examined in this study.

Cost is an important factor, but industry has also nominated reliability as an important requirement for stevedoring services (for example, Metal Trades Industry Association, response 9, p. 1; Australian Chamber of Manufactures, response 8, p. 2). The direct costs of delays are substantial, estimated at about $30 000 per day for a ship with a 2000 TEU[4] capacity (BTCE 1995a). The spectre of unreliable service may also mean that firms incur additional indirect costs through, for example, the maintenance of higher than normal inventory levels (which may require additional storage facilities) and that exporters may suffer as overseas buyers lose confidence (PC 1998).

Overall, while productivity improvements in stevedoring are important, the savings from improved reliability may be more significant in reducing costs to users (PC 1998).

Recent studies of the performance of container stevedoring operations have found that the performance of Australian stevedores lags that of overseas operations. The Productivity Commission (1998) found that container operations in Australia had higher terminal charges, lower rates of productivity and less reliable service than comparable operations in several other countries (box 1.1).

Box 1.1: Productivity Commission international benchmarking study of the waterfront

A recent Productivity Commission study of waterfront performance found, after allowing for disadvantages resulting from the scale of container stevedoring operations in Australia, that:

- container handling charges were, on average, higher than those at any of the overseas terminals surveyed;
- labour and capital productivity were lower than at overseas terminals; and
- the reliability at Australian container terminals was relatively poor.

Source: PC (1998)

The Commission also found that notwithstanding improvements in recent years, there is significant scope to improve Australian container stevedoring performance. Similar conclusions were drawn in the preceding benchmarking study by the BIE (1995b).

[4] TEU (20-foot equivalent unit containers). Containers are usually either 20 or 40 feet in length.

Flexibility in the allocation and use of labour are critical to stevedore workplace performance. Flexibility is required to meet the highly variable demand for stevedoring services generated by:

- the number and type of ships arriving at any one time;
- the number of containers to be loaded and unloaded; and
- unexpected factors, such as delayed arrivals and difficult stows.

This variability is particularly pronounced at Australian ports because of the 'thinness' of shipping trades (low volumes over long distances) and the need for ships to make multi-port calls.

In the container stevedoring industry, labour is an integral part of the stevedoring process, so the direct cost of labour is relatively high. Work arrangements are a major determinant of the cost of labour and the incentives faced by managers and employees to improve performance. They also affect productivity, timeliness and reliability.

1.1 Approach

The stevedoring industry adopted enterprise bargaining in the early 1990s to replace the previous industry-wide labour arrangements. This provides a strong rationale for shifting the focus of research on work arrangements to the workplace level. Unlike previous research (for example, BTCE 1995a; HRSCTCI 1992), this study focuses on one element of the waterfront chain of services (stevedoring) and examines in detail a range of work arrangements in selected container stevedoring workplaces. The advantage of this approach is that it can reveal important insights into:

- the nature and extent of work arrangements (for example, whether and how they vary across workplaces);
- interrelationships among work arrangements (for example, how rostering arrangements affect manning levels);
- links between work arrangements and workplace performance (for example, how pay systems influence incentives and productivity); and
- internal factors (such as workplace culture) and external factors (such as the industry structure and industrial relations framework) which may be inhibiting changes in work arrangements.

This study describes and analyses these issues, thereby providing a factual base for further public policy debate. It identifies, describes and discusses a number of work arrangements and their effects on workplace performance, but it does

not make recommendations about any individual arrangements as this is outside the scope of the study.

The Commission has consulted with a range of industry participants: stevedoring employers, maritime unions (the Maritime Union of Australia and the Australian Maritime Officers' Union) and other parties, including government departments and specialist academics (appendix A). In addition, public input was invited in response to a Research Issues Brief. This phase assisted in:

- defining the scope of the study and the likely set of issues; and
- selecting the work arrangements and workplaces for analysis.

Scope

Only stevedoring services are examined in this study, particularly the core functions of stevedores — the loading/unloading of ships and the loading/unloading of freight of land transport operators servicing the wharf (receival and delivery).

The focus is on container terminals, not bulk or break bulk terminals, in order to facilitate comparability across workplaces.

Measurement of workplace performance

Work arrangements are one of many factors that affect workplace performance. Others include:

- the technology used by the workplace;
- the institutional and competitive environment faced by the workplace;
- level of throughput;
- difficult stows;
- the mix of container sizes; and
- late delivery and receival (appendix E).

Given the variety of factors that influence workplace performance, it is difficult to quantify the impact of changing any one work arrangement on workplace performance.

While the direct effects of some work arrangements may be measurable, for others it is only possible to assess the direction and perhaps broad magnitude of their effects on workplace performance. For example, the direct and indirect effects of redundancy costs on output and investment are not easily estimated.

Workplace arrangements are discussed in terms of their effects on:

- productivity — the amount of output that can be produced from a given set of inputs;
- timeliness — which relates to the delivery of cargo on time;
- reliability — which relates to the variability in the time taken to deliver cargo; and
- costs.

Productivity has important interactions with the other indicators of performance. It has a direct relationship with workplace costs — when factor prices are constant, the relationship between productivity and costs is strictly proportional.

Improvements in productivity also affect timeliness and reliability. For example, higher net crane rates[5] (a commonly used measure of productivity in stevedoring) can result in quicker loading and unloading of ships. This can lead to shorter ship turnaround times. If crane rates are consistently high, timeliness and reliability can be improved.

Selection of work arrangements

Work arrangements are broadly defined to include the way in which work is performed and the conditions attached to that work. They include arrangements specified in the *Stevedoring Industry Award 1991* and enterprise agreements, as well as those which have evolved through custom and practice. Many of the work arrangements are interconnected: they are negotiated as a package and agreed by management and employees at the workplace.

The process of selecting work arrangements for detailed analysis in this research was iterative. Work arrangements were initially selected on the basis of preliminary consultations and a detailed analysis of the Stevedoring Industry Award, enterprise agreements and secondary sources. This phase revealed a complex set of highly prescriptive arrangements that could reduce performance.

The Research Issues Brief provided interested parties with the opportunity to comment on the work arrangements initially selected. The list of specific work arrangements was finalised following the detailed discussions with managers, supervisors and site committees at the chosen workplaces (table 1.1).

---

[5] Broadly defined as the average number of containers moved per net hour per crane. Net time is equal to time from labour on to labour off minus time unable to work the ship due to award shift breaks, ship's fault, weather, awaiting cargo, industrial disputes, holidays, or shifts not worked at the ship operator's request.

Table 1.1: Work arrangements selected for analysis

Broad arrangement	*Specific arrangement*
Rostering	Order of engagement Equalisation schemes Notification Rostered time off Shift types Shift length
Manning	Gang sizes Continuous work shifts Manning scales Manning levels
Recruitment, redundancy and contracting	Preference clause Selection process Redundancy provisions Contracting
Remuneration	Base plus pay systems Shift premiums Penalty rates Productivity schemes Aggregate wage systems Hours worked and wage levels
Paid non-working time	Shift breaks and delays Shift extensions Call-up payments Idle time Leave arrangements

Selection of workplaces

The study is concerned with container terminals. Five Australian workplaces handling containers were selected for analysis:

- Sea-Land (Port Adelaide);
- CTAL (Port Botany, Sydney);[6]
- P&O Ports (Port Melbourne);
- Patrick (Port Melbourne); and
- Patrick (Fisherman Islands, Brisbane).

[6] P&O Ports has a major shareholding in the CTAL terminal and operates the terminal as part of its national terminal operations.

Throughput and employment at the stevedoring workplaces examined is given in table 1.2. The terminals selected account for around three quarters of the annual throughput handled at major container terminals in Australia. Selection of the workplaces considered:

- the scope to document variations in work arrangements;
- the importance of including larger as well as smaller stevedoring operations; and
- the ability to compare the same stevedoring company in different cities and to compare different stevedoring operations in the same city.

Table 1.2: Throughput and employment of operational employees, stevedoring workplaces examined, 1996-97

Workplace	*Port*	*Location*	*Throughput*	*Employment*[a]
			'000 TEUs[b]	no.
Sea-Land	Port Adelaide	Adelaide	87	129
CTAL	Port Botany	Sydney	351[c]	400
P&O Ports[d]	Port Melbourne	Melbourne	326[c]	345
Patrick	Port Melbourne	Melbourne	434	346
Patrick[e]	Fisherman Islands	Brisbane	105	127
Fergusson	Port of Auckland	Auckland (NZ)	290	204[f]

a Operational employees, excluding supervisors. Estimates for Australian workplaces include permanent full-time employees, guaranteed wage employees and supplementary employees. Australian vocational trainees are counted as permanent employees.

b 20-foot equivalent unit.

c Calendar year 1996.

d West Swanson Container Division.

e Operational employees at Patrick Brisbane also carry out some break bulk operations.

f Includes a proportion of maintenance employees at the Ports of Auckland based on the ratio of TEU throughput of Fergusson Terminal to TEU throughput of the Ports of Auckland. Does not include all clerical employees. Includes permanent and casual employees.

Source: Workplace information requests

Fergusson Terminal in New Zealand was chosen for an international comparison for a number of reasons. First, New Zealand and Australia are countries with broadly similar cultures and living standards. Second, the annual throughput of Fergusson Terminal falls within the range of container throughput handled by the selected Australian workplaces. Third, extensive reforms have been undertaken in the New Zealand waterfront, transport sector and labour market in the past decade (appendix I), which have led to significant increases in productivity and lower costs. Finally, consultations suggested that work

arrangements in New Zealand differed significantly from work arrangements in Australian terminals.

Fergusson Terminal is not necessarily representative of stevedoring operations more generally in New Zealand, because there appears to be considerable variability in work arrangements in stevedoring operations in that country (appendix I). Thus, Fergusson Terminal has not been identified as a 'model' workplace, but as illustrative of alternative work arrangements.

Data collection

A number of methods were used to collect qualitative and quantitative data from:

- consultations with selected industry participants;
- a public call for views and evidence;
- detailed discussions at selected workplaces; and
- workplace information requests.

Data were supplemented by information drawn from:

- the Stevedoring Industry Award, enterprise agreements of the selected Australian workplaces and any industry-specific and general industrial relations legislation;
- the awards of four other industries: the *Transport Workers Award 1983*, the *Storage Services — General — Interim Award 1996*, the *Metal Industry Award 1984* and the *National Building and Construction Industry Award 1990*;
- previous studies on the industry, including government inquiries and reports; and
- labour economics, industrial relations, occupational health and safety and human resource management literature.

Further details about the information collection methods can be found in appendix B, while a detailed analysis of awards and agreements appears in appendix J.

1.2 Report structure

The next chapter describes the key features of the stevedoring industry, its workforce characteristics and recent changes to work arrangements in the industry. Aspects of the culture of Australia's stevedoring workplaces are

discussed in chapter 3. Culture influences how people respond to existing work arrangements and how they develop new arrangements.

The subsequent five chapters consider work arrangements relating to rostering (chapter 4), manning (chapter 5), recruitment, redundancy and contracting (chapter 6), remuneration (chapter 7) and paid non-working time (chapter 8). The impacts of selected work arrangements on workplace performance, along with their benefits and costs to employees and users of stevedoring services, are the focus in these chapters. These discussions are drawn together in chapter 9, which highlights the links between these work arrangements, the main beneficiaries and losers, and impediments to the introduction of performance-enhancing work arrangements.

2 CONTAINER STEVEDORING IN AUSTRALIA

There are only two major providers of container stevedoring services in Australia, and throughput at Australian ports is low by international standards. Flexibility in service provision is important, given the unpredictable and variable nature of demand. Major changes occurred in the industry under the waterfront industry reform process during 1989–92, in a bid to improve the sector's performance. Enterprise agreements negotiated since this time have tended to be complex and highly prescriptive. The agreements incorporate most of the details of the majority of work arrangements operating at the workplaces. The Stevedoring Industry Award, however, still provides the structural basis for the development of some work arrangements in enterprise agreements.

This chapter outlines the structure and operation of the container stevedoring industry and describes workforce characteristics — including the types of labour employed by Australian container stevedores and their entitlements. The chapter also summarises recent reform of stevedoring services and changes in work arrangements.

2.1 Industry structure and operation

The core functions performed by stevedores on the waterfront are the loading and unloading of cargo from ships, and the loading and unloading of cargo from land transport operators servicing the wharf. Stevedoring services in Australia and New Zealand are performed under contract with shipping lines; there is no contractual link between stevedores and transport operators, importers or exporters (PC 1998).

Containerisation is an important means of transporting cargo (box 2.1). Container imports, for example, accounted for around two-thirds of the total value of imports handled by the Australian waterfront in 1995-96 (PC 1998).

Box 2.1: Containers and their contents

Reusable containers for carrying cargo were first widely adopted in the late 1950s. The International Standards Organisation reached agreement in 1966 on standard shipping container sizes, based on an eight-foot square external end area with lengths varying in multiples of 10 feet from 10 to 40 feet and incorporating standard fastening and lifting points.

The 20-foot length (representing one TEU) is the most common container in use in Australia. However, 40-foot containers (equal to two TEUs) are also used, particularly in trade with North America.

Contents of import and export containers, Sydney, 1995-96

Major commodity exports	'000 tonnes	Major commodity imports	'000 tonnes
Non ferrous metals	484	Chemicals	578
Chemicals	360	Paper and paper products	418
Iron and steel	288	Machinery and electrical equipment	372
Meat	203	Fruit and vegetables	140
Cereals	203	Textiles, yarns and fabrics	125
Cotton	164	Iron and steel	97
Paper and paper products	161	Beverages and tobacco	91
Wool	152	Non ferrous metals	79
Machinery	89	Timber	51
Beverages and tobacco	55	Fish and seafood	50

Source: Sydney Ports Corporation (1996, p. 20)

There are various types of containers based on these dimensions, such as open top, open sides, ventilated and refrigerated. Refrigerated containers (known as 'reefers') are used for the shipment of perishable goods such as meat, fruit and vegetables. Substantial quantities of perishable goods are exported and imported in containers.

Reefers require monitoring on the wharf to ensure that the refrigeration system is in operation.

Large quantities of chemicals are also imported and exported in containers. Containers holding hazardous chemicals require special handling and storage procedures.

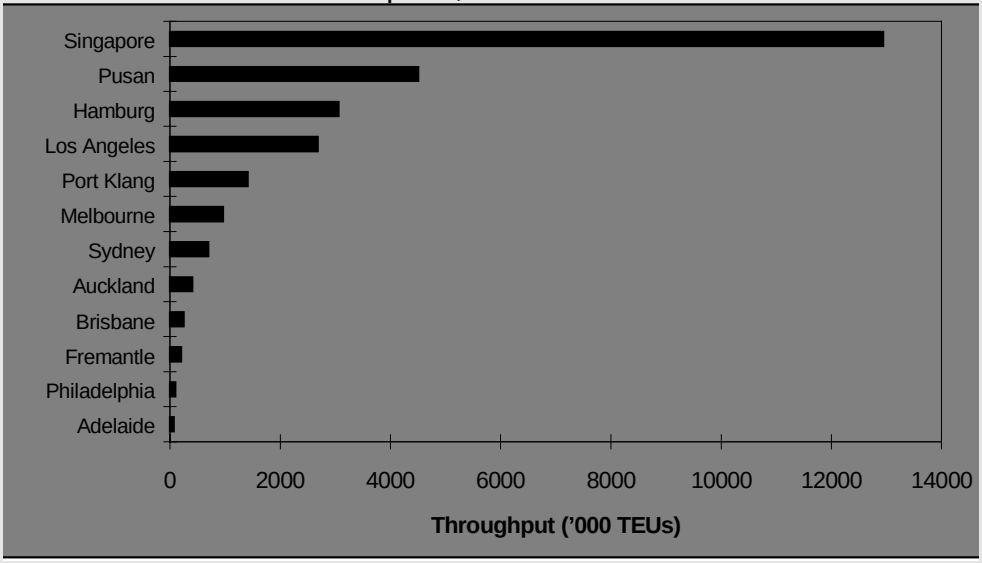
Source: BTE (1986, pp. 10–12)

The Australian waterfront is characterised by the 'thinness' of shipping trades (low volumes over long distances — box 2.2) and the need for ships to make multi-port calls (PC 1998).

Box 2.2: Container traffic in overseas ports

The throughput of Australia's container terminals is small compared with the volumes handled by major ports in Asia, North America and Europe. The higher cost of container operations in Australia is partly related to the lower levels of throughput.

Container traffic at selected ports, 1995-96



Data source: TCS (1997a)

Scale of throughput is also a determinant of the quantity and quality of equipment used at container terminals.

An average of 37 600 containers was handled in Australian container terminals per quay crane in 1995-96. In contrast, each quay crane in some terminals in Singapore and Pusan handled an average of approximately 110 000 containers in the same period.

Higher levels of throughput reduce the unit capital costs of providing container stevedoring services. This may allow operators in terminals with a high level of throughput to invest in equipment that is capable of higher levels of performance (such as crane lifts per hour). If similar equipment were used in terminals with relatively low levels of throughput, then unit capital costs would be higher.

Source: TCS (1997a)

Container handling in Australian ports is concentrated around mainland capital city ports, with terminals in these ports accounting for about three quarters of this work (table 2.1).

Table 2.1: Australian container terminal operations, by port, 1995-96

Port	*Port throughput*	*Proportion handled by container terminals*[a]
	'000 TEUs	%
Melbourne	923	73
Sydney	699	84
Brisbane	249	78
Fremantle	203	95
Adelaide	69	96
Regional ports[b]	261	na
Total	**2404**	**71**[c]

a Includes major container terminals operated by P&O Ports, Patrick and Sea-Land.

b Other Australian ports including Hobart, Burnie and Darwin.

c Container terminal share of total port throughput.

na Not applicable.

Sources: BTCE (1997a); Melbourne Port Corporation (1996); SCNPMGTE (1996)

Nearly all container handling services at the mainland capital city ports, are supplied by two operators — P&O Ports and Patrick The Australian Stevedore.[1] Adelaide has a single operator (Sea-Land (Australia) Terminals), but it accounts for only around 4 per cent of the combined throughput of the major container terminals (table 2.2).[2]

In New Zealand, the port of Auckland has four operators. One operator has exclusive use of Fergusson Terminal and moves 70 per cent of the total port container throughput. The other three operators share Bledisloe Terminal, a common user facility suitable for container operations (table 2.2).[3]

There is some movement of contracts between stevedores at Australian ports, but the shipping lines' choice of stevedoring options is limited. Competition is not as intense as in New Zealand where there is a greater number of stevedores

1 The company now known as Patrick is the result of several company mergers in the stevedoring industry during the early 1990s. The most recent merger occurred between the then Strang Patrick Stevedoring and National Terminals (Australia) in July 1992 to form Australian Stevedores. In September 1994, Jamison Equity (now the Lang Corporation) acquired the shares in Australian Stevedores held by Howard Smith and ANL.

2 Sea-Land recently announced that it intends to open a container terminal in Brisbane (Daily Commercial News, 9 February 1998, p. 5).

3 Common user facilities enable any stevedore to use the container terminal facilities, such as quay cranes and straddle carriers, on a short-term lease basis.

at most ports, contracts change hands more frequently and the cost of entry and exit is lower (appendix I). Australian interport competition is further limited by the large distances between ports and the high cost of transport by road or rail relative to the cost of sea freight (chapter 9).

Table 2.2: Market structure of container terminal operations, by port, 1995-96

Port	*Container operators*	*Annual throughput*[a]	*Cranes*	*Straddles*
	no.	'000 TEUs	no.	no.
Sydney[b,c]	2	587	10	28
Melbourne[b]	2	674	10	56
Brisbane[b]	2	194	6	d
Adelaide	1	66	2	12
Auckland[e]	4	405	7	36

a Estimates based on table 2.1.
b Number of cranes and straddles are for Patrick and P&O only.
c Includes 12 rubber tyred gantries used by one operator.
d Mix of equipment used, so unable to aggregate.
e Three operators use Bledisloe Terminal, a common user berth.
Sources: BTCE (1997a); Ports of Auckland (1997); workplace information requests

Pattern of ship and cargo arrivals

Several characteristics of container stevedoring affect planning and labour requirements, including:

- terminal operating hours;
- the variability and unpredictability of ship arrivals;
- the variability in size of exchange;
- interface with land transport; and
- seasonal variability.

Container stevedoring can be a 24-hour, seven-days-a-week operation, particularly at large mainland workplaces. This reflects the demands of shipping lines which incur high daily fixed costs when a ship is tied up at a wharf — estimated at $30 000 a day for a ship with a 2000 TEU capacity (BTCE 1995a).

Stevedores typically face highly variable demand for their services. This is generated by variability in ship arrivals and the size of exchanges (the number

of containers loaded and unloaded). An analysis of ship arrivals at Sydney container terminals in 1995 found an almost random pattern of arrival times (BTCE 1995a, p. 19). An earlier study of a sample of ship arrivals at the first port of call in Australia found that approximately 50 per cent arrived on the day which was specified two weeks earlier, the remainder were spread between being three days early and five days late (BTCE 1993, p. 103).

Most stevedores attempting to accommodate variability in ship arrivals now try to plan labour requirements based on arrival and departure time 'windows'. If a ship arrives within a certain time window, enough labour is allocated for ship loading and unloading purposes to ensure the ship is ready to leave within its departure time window. Pricing signals, through penalties and bonuses between stevedores and shipping lines, encourage both parties to better adhere to shipping windows.

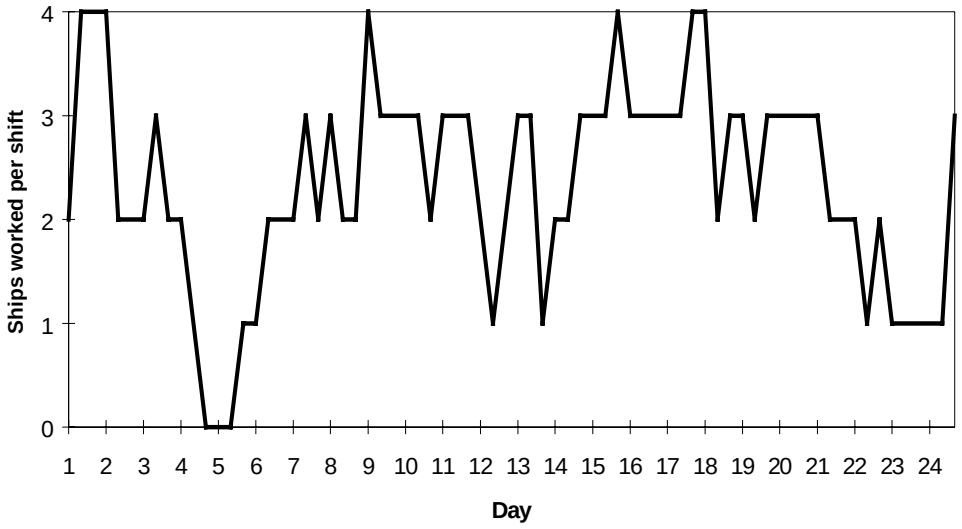
However, substantial variability will remain as a result of several influences outside the control of stevedores. Ship arrivals are affected by factors such as weather conditions and delays in other ports. These introduce an element of uncertainty into arrival times, and stevedores may have to respond to late or early arrivals at short notice. The daily variation in ship arrivals is illustrated by figure 2.1, which shows the number of ships being worked per shift at the CTAL terminal, Sydney, over a 24-day period in 1995.[4] An average of 2.4 ships were worked per shift, but the number of ships worked ranged from zero to four (full berth capacity for the terminal).

Such fluctuations in the demand that stevedores face for their services (from the variability in ship arrivals and the number of containers loaded and unloaded), mean that flexible work arrangements are critical to workplace performance. Other factors that also contribute to this need include unexpected difficulties in the lashing task (chapter 5), storage constraints related to receival and delivery of containers, and seasonal variation.

There is limited storage available in waterfront areas. Therefore, the movement of containers received from ships and delivered to land transport operators (and vice-versa for outgoing containers) is related to the arrival of ships and exchange sizes. Container stevedores generally deliver to, and receive containers from, land transport operators between 7 am and 3 pm on weekdays (the day shift) and as required by land transport operators at other times, including weekends. Rail operations by stevedores are performed as required.

[4] This period was considered by CTAL to be 'representative' of the operations of the terminal (response 10, p. 12).

Figure 2.1: Ships worked per shift, CTAL terminal, selected period in 1995



Source: Response 10, p. 14

The type of cargo handled at each port affects the pattern of demand over the year. Sydney, for example, generally has a larger share of import containers than export containers. This results in greater demand for container stevedoring services around October and November, when wholesale and retail firms build up stock levels before the Christmas season.

In contrast, the higher proportion of export containers in Brisbane results in significant seasonal variation related to the shipment of primary produce (mainly cotton and meat) between June and October each year. The similar mix of import and export containers in Melbourne means that the port is less affected by seasonal patterns.

2.2 Employment in stevedoring

Employees in the stevedoring industry work in bulk and break bulk operations as well as container operations. Workforce characteristics of these employees are described in detail in appendix D. In summary, the typical stevedoring employee is likely to be male, in his mid-40s, and Australian born. This employee is likely to have relatively low levels of formal education, be involved in a job with often long and variable hours, and be relatively highly paid.

The detailed discussions revealed that employee turnover in container stevedoring is still very low relative to other industries — in some cases zero. In comparison, almost 20 per cent of all Australian employees changed employers between 1994 and 1996 (ABS 1997b).

Employees are grouped into grades according to skill level. A description of the tasks performed by operational employees[5] in the container stevedoring process is contained in appendix C and summarised in table 2.3. Tasks discussed in detail include those performed by foremen, clerks, maintenance employees and also those tasks of the machinery operators and general duties employees, such as driving quay cranes and straddle carriers and performing lashing duties. The mix of tasks indicates the need for a workforce comprising both skilled, experienced and less skilled employees.

Stevedoring is a capital intensive industry. Given the nature of the work process, individuals — for example, those operating expensive and sophisticated equipment such as quay cranes — can have a significant impact on overall workplace performance.

Improvements in work arrangements affecting individual efficiency can translate into higher workplace productivity and reliability — for example, improvements in work arrangements that provide the incentive for crane drivers to work more efficiently can lead to higher crane rates and improved timeliness.

Other factors can also impact on workplace performance (chapter 1). These include factors outside the stevedores' control that specifically relate to the loading and unloading of a ship (box 2.3 and appendix E).

Three main unions cover employees in the container stevedoring industry. Supervisors and planners are members of the Australian Maritime Officers' Union (AMOU). In some terminals, electricians are members of the Communications, Electrical, Electronic, Energy, Information, Postal, Plumbing and Allied Services Union of Australia (CEPU) (table 2.3).[6] Virtually all operational employees, including clerks, machinery operators, general duties and some maintenance employees, are members of the Maritime Union of Australia (MUA).

[5] All employees in grades 1 to 6 and Australian vocational trainees. Excludes supervisors and management.

[6] Approximately 25 CEPU members work in stevedoring maintenance positions nationally.

Table 2.3: Container stevedoring labour arrangements at a typical workplace[a]

Occupation and grade[b]	*Responsibility/duties*	*Union*[c]	*Employment arrangement*
Management			
Terminal manager	General management of the container terminal	Nil	Individual contracts
Operations manager	Logistical aspects of the terminal	d	Individual contracts
Supervisors	Working of the ship	AMOU	SIA,[e] EAs[f]
Ship and yard planners	Determine where containers are placed on ship and in yard	AMOU	SIA, EAs[f]
Operational employees			
Permanent full-time employees			
Foreman (typically grade 5 or 6)	Coordinate/monitor operational employees	MUA	SIA, EAs
Clerk (typically grade 4, 5 or 6)	Track movements of containers	MUA	SIA, EAs
Machinery operators (typically grade 3, 4, 5 or 6)	Work as crane driver, straddle driver	MUA	SIA, EAs
General duties employee (typically grade 3, 4 or 5)	Work in general duties/lashing	MUA	SIA, EAs
Maintenance (mechanic or electrician) (typically grade 4 or 5)	Maintain equipment	MUA or CEPU	SIA, EAs
Permanent part-time employees (guaranteed wage employees) (various grades)	Depends on skills acquired	MUA	SIA, EAs
Supplementary employees (various grades)	Depends on skills acquired	MUA	SIA, EAs
Australian vocational trainees	Undergo structured training program	MUA	*Stevedoring AVT Award 1994*

a Simplified description of labour arrangements in a typical stevedore workplace. Some workplaces may have other types of employees (including engineering service managers or commercial managers).

b For full list of grades based on skill levels, refer to table C.1.

c Australian Maritime Officers' Union (AMOU); Maritime Union of Australia (MUA); Communications, Electrical, Electronic, Energy, Information, Postal, Plumbing and Allied Services Union of Australia (CEPU).

d Some operation managers may be members of the AMOU.

e *Stevedoring Industry Award 1991*.

f Supervisors and planners at Patrick terminals are covered by the same enterprise agreement (EA) across Patrick workplaces as well as by the Stevedoring Industry Award. Supervisors and planners at P&O terminals are covered by a separate EA at each workplace, the operational employee EAs and the Stevedoring Industry Award.

Sources: Stevedoring Industry Award; selected enterprise agreements

The high level of union membership in the stevedoring industry is in contrast with substantially lower levels of union membership — approximately 25 per cent — in the private sector workforce as a whole. The level of union membership in industries covered by awards used to compare employee conditions in chapter 7 is approximately 40 per cent for manufacturing industries, 50 per cent for the transport and storage industries and 30 per cent in construction (ABS 1997c).[7]

Box 2.3: Some factors affecting container stevedores' performance in loading and unloading a ship

A number of factors act as constraints on the performance of Australian container stevedores in loading and unloading a ship (see appendix E for a more detailed discussion). These include:

Throughput. Large international hub ports discharge relatively large ships using four or five cranes. In Australia, at most three cranes are used. As the Container Business Manager from P&O Ports Victoria recently stated:

> If we had 90 per cent transhipment instead of 10 per cent and vessels of 6000 TEU capacity instead of 600 TEU, with single destination cargoes, and no late changes to cargo stowage and lower safety standards, we would achieve over 30 containers per crane on all vessels, all of the time. (MUA 1997a)

Difficult stows. Some stevedores, being either a first or last port of call, tend to have more difficult stows. A number of containers may need to be moved (and later restowed) to access the containers required. As Captain Andrews from Sea-Land explained:

> Adelaide may only have half the container rate of some Sea-Land terminals, but all our other terminals trade Sea-Land stowed ships. Stow is central to productivity. Sea-Land ships are computer stowed. The boxes that come off first are stowed on the side of the ship, not in the middle where you have to lift them four high to get them out. (MUA 1997b, p. 46)

Mix of containers. The number of 40-foot containers versus 20-foot containers loaded and unloaded affect productivity. The 20-foot containers are generally more difficult to load and unload.

[7] Several awards used for a comparison of award conditions in this report may cover employees performing similar work in several industries. The *Storage Services — General — Interim Award 1996*, for example, covers employees working in several industries (including retail trade, wholesale trade and manufacturing).

Types of stevedoring employment

There are four main types of operational labour employed by Australian stevedores, each with a different set of employment conditions:

- full-time permanent employees;
- guaranteed wage employees;
- supplementary employees; and
- Australian vocational trainees.

Full-time permanent employees accounted for over half of employees in the stevedoring industry in 1997 (table 2.4), but prescribed engagement arrangements mean that they undertake the majority of the hours worked. Full-time permanent employees are engaged on a full-time continuing basis and are entitled to an average of 35 ordinary hours of work per week (see chapter 7 for a detailed discussion of hours worked). They are also entitled to other conditions of service such as annual leave, sick leave and long service leave.

Table 2.4: Stevedoring employees, by type and employer, 1997[a]

Employer	*Permanent*	*Guaranteed wage employees*	*Australian vocational trainees*	*Supplementary labour pool*[b]	*Total*
Patrick	1440	70	..	1260	2780
P&O Ports	1350	300	40	590	2280
BHP	210	25	..	90	320
Sea-Land	90	20	10	10	130
Strang	30	10	..	80	120
Other[c]	200	..	..	85	285
Total	**3320**	**425**	**50**	**2115**	**5910**
Per cent of industry total[d]	**56**	**7**	**1**	**36**	**100**

a Includes container, break bulk and bulk terminals. Employee numbers are rounded to nearest five.

b Indicates the approximate number of supplementary employees available to work for each stevedore. Actual use of supplementary employees varies according to work arrangements at each workplace and the level of demand for stevedoring services (chapter 5).

c Includes regional stevedores such as Northern Shipping and Stevedoring and Federated Stevedores and operators in major ports such as Union Stevedoring and Brambles.

d Indicates the share of employees in each category.

.. Nil or rounded to zero.

Source: Workplace information requests

The use of permanent employees in stevedoring dates back to the late 1960s. Previously, all stevedoring employees were hired on a casual basis from an

industry-wide pool of labour. Technological changes in the 1960s, particularly containerisation, and the need for a more highly skilled workforce led to the introduction of permanent employment opportunities.

Guaranteed wage employees are also engaged on a permanent basis. They are guaranteed pay for a minimum number of hours per week (two shifts at the workplaces examined in this study). Additional work may be available as required by the stevedore. These employees are also entitled to other conditions of service such as annual leave on a pro-rata basis.[8] They comprise around 7 per cent of Australian stevedoring employees.

Supplementaries are employed on an 'as and when required' basis. They do not receive additional entitlements such as sick leave or annual leave, but do receive a 20 per cent premium over the shift rate (table 2.5). Supplementary employees may work for more than one employer, and they receive a minimum payment of one shift on any day when engaged by a stevedore.

Each employer maintains a pool of supplementary employees. The number of new supplementary employees that can be recruited to the pool is prescribed in some enterprise agreements. The shifts to which they can be allocated are significantly restricted by the order of engagement (chapter 4). Thus, the number of supplementary employees actually called on in any week is usually less than the full size of the pool, and larger pools of supplementaries for some companies do not necessarily equate with increased flexibility in labour supply. Supplementary employees have mainly comprised former permanent employees who left the industry under the redundancy program of the Waterfront Industry Reform Authority (WIRA), although they are being progressively replaced. The supplementary labour pool currently makes up about one third of stevedore employees (table 2.4).

'Casuals' are typically a more significant part of the New Zealand stevedoring workforce than are supplementary employees in Australia. In New Zealand, casual labour may comprise from close to all of a workplace's operational stevedore workforce to less than 25 per cent. In those workplaces with lower proportions of casual employees, permanent employees tend to have the more skilled jobs, (for example, crane driving), while the casuals perform the less skilled tasks (such as lashing).

[8] However, notification provisions that apply for permanent employees do not generally apply for guaranteed wage employees (or supplementaries) (chapter 4).

Table 2.5: Stevedoring employee entitlements

	Permanent employee	*Supplementary employee*
Average 35 ordinary[a] hours work per week	yes	no
Shift premiums and penalty rates	yes	yes[b]
Holiday rates of pay[c]	yes	yes
Redundancy payments	yes	no
Annual allowance[d]	yes	yes[e]
Annual leave	yes	no
Sick leave	yes	no
Compassionate leave	yes	no
Jury leave	yes	no
Rostered time off	yes	no

a Ordinary hours are rostered shift hours.

b Supplementary employees receive a 20 per cent loading on pay rates to account for loss of other entitlements common to permanent operational employees.

c The Stevedoring Industry Award specifies the rate of pay for employees working on any holiday.

d The allowance is paid in lieu of other payments covering items such as laundry, telephone and allowances for certain work conditions, including working in oily and greasy conditions, and in wet weather.

e Supplementary employees are paid 1/250th of the annual allowance for each day worked.

Sources: Stevedoring Industry Award; selected enterprise agreements

Australian vocational trainees are part of a national training scheme (the Australian Vocational Training System) administered by the Australian National Training Authority. They are employed under the *Stevedoring Australian Vocational Training System Award 1994* and undergo a structured training program (consisting of on-the-job and off-the-job training for a period of two years). Training is based on defined industry competency standards. The scheme does not guarantee employment on completion.

Recruitment of operational employees, supervisors and managers is discussed in chapter 6.

Industrial disputation

Despite a significant reduction in 1996 and 1997 in the average total number of working days lost per employee as a result of industrial action, the incidence of industrial disputation in the stevedoring industry remains comparatively very high, and is exceeded only by coal mining (table 2.6). This has important implications for reliability of stevedoring services and its impact on service users.

Table 2.6: Industrial disputation by industry, 1992–96 (working days lost per '000 employees)

Industry	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*six-year average*
Coal mining	3078	2915	5964	7707	7171	4206	5174
Stevedoring[a]	1729	1737	4598[b]	2472	836	609	1997
Construction	126	41	29	865	892	290	374
Other mining	840	254	323	128	73	19	273
Metal products/machinery and equipment	309	426	117	153	146	180	222
Education/health and community services	172	106	63	181	187	73	130
Other manufacturing	243	121	123	75	70	104	123
Transport and storage/communication	192	37	137	53	43	101	94
Other industries	57	41	16	16	17	11	26
Average all industries	**147**	**100**	**76**	**79**	**131**	**74**	**101**

a The number of working days lost is from ABS 1997a. Employment data for 1992 and 1993 use industry statistics collected by the Waterfront Industry Reform Authority. Productivity Commission estimates of employment for each year over the period 1994–96 assume a fixed intake per year to reach employment levels in 1997. Estimates of employment in the stevedoring industry include full-time, part-time and supplementary employees working in container, break bulk and bulk operations.

b This figure is significantly inflated by disputation over proposed redundancies at Australian Stevedores (now Patrick) Sydney (box 6.3).

Sources: ABS (1997a); BTCE (1995a); unpublished ABS data; workplace information requests

These Australian Bureau of Statistics (ABS) data tend to understate the extent of time lost, because a dispute at an establishment is not included when the time lost by all workers involved in the stoppage is less than 10 working days.[9]

ABS statistics also do not cover disputes which involve a part withdrawal of labour, such as 'go-slows', work–to–rule and overtime bans. Authorised stoppages, such as stop work meetings, are also excluded from the ABS data.[10]

To gauge the extent of time lost as a result of a wider range of industrial action, the Productivity Commission obtained detailed data from a large stevedoring workplace over the period 1994–97 (table 2.7). These data exclude disputes

9 Incident statistics may not include, for example, an hour-long stoppage involving up to 79 workers (which, assuming an eight hour day, would sum to less than 10 working days).

10 The Stevedoring Industry Award includes provisions for two paid and six unpaid stop work meetings per year of up to four hours duration (clause 46).

which involved a part withdrawal of labour. Over the period, a dispute occurred almost every month on average and resulted in a loss of work of approximately 150 working days. The pattern of working days lost at the terminal shows that a small number of disputes involving large numbers of working days lost accounted for a significant proportion of lost working time.

Table 2.7: Incidence and duration of disputation[a] at an Australian container terminal, 1994–97

Working days lost per dispute	*Number of disputes*	*Total working days lost*
Less than 10	7	18[b]
11–100	11	621
101–200	7	1010
201–300	1	249
301–400	3	1100
401–500	3	1293
More than 500	1	642
Total	**33**	**4933**

a Reasons for disputation include, among others, walk off under union direction; stop work; and walk off.

b Several disputes recorded did not result in any recorded time lost.

Source: Workplace information request

The incidence of industrial disputation varies among the workplaces examined. Smithwick (1995, p. 12) noted that amount of disruption at the CTAL terminal caused by actions such as ‘go-slows’, was at least equal to that recorded in ABS statistics. Some other stevedores indicated the incidence of disputes involving part withdrawal of labour had been relatively minor in the last few years.

Occupational health and safety

Easson, McCann and Ronfeldt (1997) found that with respect to occupational health and safety:

> ... the available statistical evidence suggests that the stevedoring industry is performing very poorly in comparison to other sectors of the maritime industry and other major industries in Australia. This is reflected in a high rate of work-related fatalities, injuries and disease. For instance, the number of work-related injuries and diseases per 1000 employees in stevedoring in 1994-95 was 169.9 whereas the next highest figure among major industries was 64.3 for the mining industry. (p. 1)

It was also noted in the same study that the incidence of new cases of work-related injury and disease in the stevedoring industry had risen dramatically over the period 1991-92 to 1994-95. Easson, McCann and Ronfeldt hypothesised that this rise may reflect increases in the intensity of work (given a smaller workforce) having led employees and supervisors to ignore basic safety standards, or an increased inclination on behalf of employees to make workers' compensation claims, or a mixture of both factors. The study concluded that many of the mechanisms of injury infliction[11] reported (such as 'body stressing' and 'falls, trips and slips') could be relatively easily remedied using a more systematic approach to occupational health and safety management and regulation (appendix G).

This poor performance in occupational health and safety entails significant costs. Workers and their families bear the costs of reduced income in the event of long-term injury, as well as the personal costs of pain and inconvenience associated with temporary or permanent disability. Employers bear the direct cost of higher workers' compensation premiums, as well as the indirect costs of training new staff, downtime and the disruption that is often associated with an injury in the workplace. There are also costs borne by the wider community, such as medical expenses and sickness benefits that can be paid if a worker is transferred from the workers' compensation scheme to the general social security system.

It is difficult to accurately quantify many of these costs. In 1995-96, workers' compensation premiums for the stevedoring industry totalled $2.9 million. Using the ratios between indirect to direct costs developed in the report *Work, Health and Safety* (IC 1995), this would imply indirect costs of around $8.7 million and total costs of around $11.6 million.

A key issue is the relations between management and workers on the waterfront (chapter 3). Easson, McCann and Ronfeldt found that 'innovation and improvements in the area of OH&S [occupational health and safety] are being frustrated by a combative industrial structure' (1997, p. 48).

The Industry Commission has noted that best practice in occupational health and safety is generally obtained by employers who have enterprise safety systems, based on the principles of total quality management (1995, p. 83). However, there may be some practical difficulties in applying such systems to stevedoring, because stevedores have limited influence over the work environment aboard ship. Safety standards can vary greatly from ship to ship.

[11] 'Mechanism' refers to the means by which the injury or illness for which the employee was compensated for was inflicted.

Wooden and Robertson (1997, p. 1) observed that job characteristics and conditions can influence the incidence of work-related injuries. Stevedoring operational employees undertake a variety of tasks — from driving vehicles to lashing containers and operating computers. The degree of exposure to injury risks is likely to vary according to different tasks and working environments (box 2.4).

Box 2.4: Job characteristics and work conditions

Stevedoring employees can experience a variety of work conditions which can have different injury risks. Down drivers, for example, may be required for lashing on unfamiliar ships. Other workers, such as clerks, usually undertake desk-related duties in a familiar office environment.

Unlike work in the office or straddle carrier, lashing duties are regularly undertaken in unfamiliar conditions because each ship is a new environment. Older and smaller ships, for example, may have less room for employees performing lashing duties to move between container stacks, and other ships may not have decking rails to protect lashing employees from falling.[12] Weather conditions can also make tasks difficult.[13] Ship and container surfaces can become slippery from a mixture of rain and oil, and maintaining balance on high exposed containers can be more difficult in strong winds. Employees on lashing duties may have to deal with poorly maintained ships (and shipboard equipment).

Source: Detailed discussions

It is beyond the scope of this study to determine the relative influence of each of these on the poor occupational health and safety performance of the stevedoring industry. However, examples of some of these factors are evident in the stevedoring industry.

2.3 Reform of stevedoring services

The Inter-State Commission examined all aspects of operations on the waterfront in an inquiry conducted between 1986 and 1989 (ISC 1989a). Responding to the recommendations of that inquiry, the Commonwealth Government established WIRA in 1989 to coordinate and monitor a three-year

[12] For a description of lashing duties, see appendix C.

[13] Work ceases under extreme weather conditions. All enterprise agreements incorporate clauses that enable work to cease (for employees not operating in air-conditioned buildings and equipment) once the temperature at the workplace exceeds a certain level, for example (appendix J).

reform process (box 2.5 and appendix F). WIRA's role included developing and implementing an 'in-principle' reform agreement between the parties in the industry.

An early retirement and redundancy program implemented as part of the reform process led approximately 4500 workers to leave the industry between September 1989 and October 1992. The program significantly changed the size and age composition of the workforce. The total cost of the program over three years was $419 million. The Commonwealth Government directly contributed $165 million. The remaining $254 million was ultimately paid by users of the stevedoring industry through a levy imposed on cargo (BTCE 1995a).

The WIRA reforms also involved a move from an industry-based labour force, which could be transferred among employers, to enterprise employment. Some aspects of work arrangements (which reflected the different requirements of each workplace) were to be negotiated at a workplace level. Other issues addressed included job structure, classification and training (box 2.5 and appendix F).

Box 2.5: Summary of WIRA reforms

Several significant WIRA reforms included:

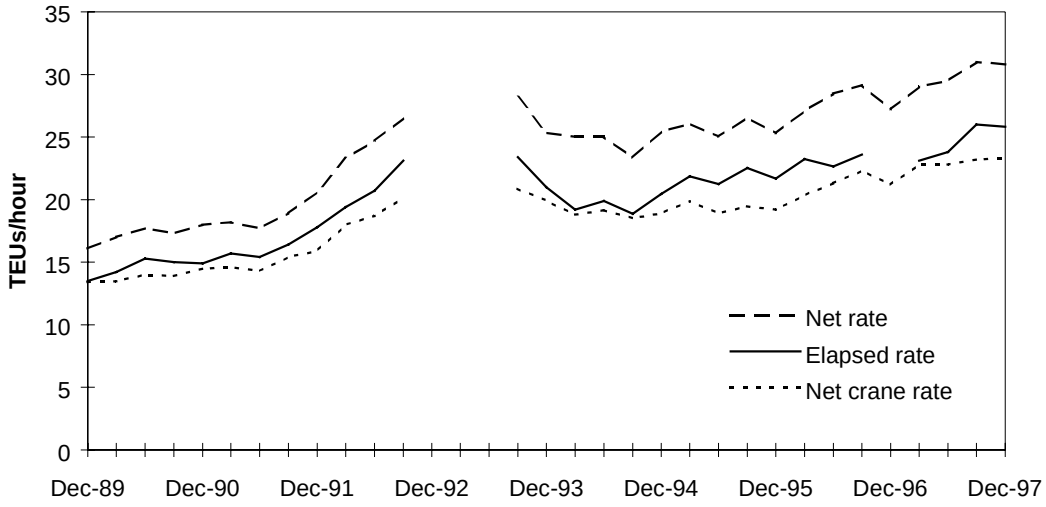
- a move from an industry-based labour force to enterprise employment, whereby all employees were directly employed by a firm. Industry-wide dispute resolution processes were also abolished;
- a retirement and redundancy program under which approximately 4500 employees left the industry. The program was funded at a cost of $165 million to the Commonwealth Government, and $254 million was paid by users of the industry; and
- the development of a single industry award which introduced new skill classifications. The award left some conditions to be included in enterprise agreements negotiated at the workplace level.

Source: BTCE (1995a)

The average level of productivity in the major container terminals, measured in TEUs, improved significantly between 1989 and 1997 (figure 2.2). (Productivity in figure 2.2 is measured in terms of TEUs rather than container lifts because time series data were available only in TEUs.) Much of this improvement occurred during the reform process (1989–92) under WIRA, when new work arrangements and conditions in enterprise agreements were implemented (see below).

A deterioration in productivity in 1993-94 led some observers to question the sustainability of the WIRA reforms (BIE 1995b, p. xvi). However, productivity increased again between 1994 and 1997. Nevertheless, the crane rates presently achieved in Australian terminals are generally below those of several overseas ports (PC 1998).

Figure 2.2: Stevedoring productivity, five-port average, 1989–97[a, b]



a All measures in TEUs. A small part of the changes in TEU-based measures of performance may reflect changes in the composition of the size of containers used in trade with Australia. One 40-foot container, for example, is equal to two 20-foot containers (box 2.1). The *net crane rate* measures the number of TEUs moved *per crane* per net hour. The *net rate* measures the number of TEUs moved per net hour for *the ship* (therefore dependent on the number of cranes working a ship). The *elapsed rate* measures number of TEUs moved *per ship* per hour based on elapsed time. Elapsed time is the total hours over which the ship is worked, measured from labour on to labour off. Data were not collected for 1992-93. The crane rate and net rate for March and June 1997 are provisional. Award shift breaks are included in the measure of time used to calculate net rates and crane rates to the end of September quarter 1992, and excluded from the measure of time in later quarters. Elapsed rates and net rates from March quarter 1997 are not directly comparable with earlier figures given changes in a terminal operator's information system.

b Five major mainland ports — Melbourne, Sydney, Brisbane, Fremantle and Adelaide.

Source: BTCE (1998)

As discussed in chapter 1, timeliness and reliability are other key indicators of stevedore performance. A survey by the Bureau of Industry Economics indicated that liner shipping companies consider the timeliness and reliability of stevedoring services to be more important than the price of the service (BIE 1995b, p. xvi). Despite an improvement of around 400 per cent in the length of ship delays over the period 1988–92 (BTCE 1995a, p. 89), the Productivity Commission's international benchmarking study found that the reliability of Australian container terminals in 1997 compared poorly with those

of overseas terminals (PC 1998). About one fifth of ships calling at Australian ports sampled for the Productivity Commission study experienced a delay, for example, that resulted from a berth not being available, industrial disputation or some other reason (PC 1998).

Changing work arrangements

The WIRA reform process saw significant changes in both the structure of the workforce and workforce demographics. Formal enterprise agreements were first developed in this industry under the WIRA reform process. Many stevedores have since negotiated subsequent agreements, usually for a three-year term.

The negotiation of work arrangements at the Australian stevedoring workplaces examined in this study are influenced by specific workplace characteristics and institutional factors (see appendix J for a detailed discussion).

Bargaining outcomes will also be influenced by the negotiating expertise of the parties, the relative strength of the parties and the extent to which organisational hierarchy (for both the stevedore and unions) brings broader organisational strategy to bear on workplace bargaining.

The enterprise agreements are complex and prescriptive, incorporating substantial detail on numerous work arrangements. These agreements are important, but so too is the Stevedoring Industry Award (which provides the structural basis for the development of detailed work arrangements in enterprise agreements). The award provisions regarding shift length and starting times, for example, form the basis of detailed roster systems negotiated at each workplace and are incorporated in the relevant agreement (table 2.8 and appendix J). The Australian Industrial Relations Commission also continues to use the award when ratifying a new enterprise agreement (chapter 9).

Table 2.8: Summary of provisions in the Stevedoring Industry Award that relate to selected work arrangements[a]

Work arrangement	*Summary of provisions*
Recruitment, redundancy	Specifies job skill grades Includes union preference clause[b]
Rostering	Defines day, evening and night shifts within time bands
Remuneration	Defines base wage for a 35-hour week (averaging possible) Defines shift premiums Defines overtime penalty rates (including double headers) Allows productivity schemes to be introduced
Paid non-working time	Defines leave conditions Defines minimum shift extension and 'call-up' payments Defines minimum breaks

a This table is a simplified summary of the award provisions relating to the work arrangements examined in this study. For details refer to table J.3 and the Stevedoring Industry Award. Caution should be applied to the interpretation of this table, given the relationship between these provisions and the enterprise agreements (appendix J).

b This provision can not be legally enforced as a result of the *Workplace Relations Act 1996*.

Source: Stevedoring Industry Award

Since the introduction of enterprise bargaining, most new stevedoring work arrangements have been incorporated in the agreements and prevail over those in the award (to the extent of any inconsistency with the award). Provisions relating to the order of engagement, roster schedules and remuneration schemes, for example, are detailed in agreements (table 2.9 and appendix J). Many of these work arrangements — for example, reduced manning scales for some types of equipment — represent a substantial change from pre-WIRA work arrangements.

Most provisions in the enterprise agreements at different workplaces are remarkably similar — for example, the order of engagement and manning scales. Only a small number of provisions vary between agreements — for example, some workplaces have adopted an aggregate wage system while others have retained a base wage plus overtime system of remuneration (appendix J).

The base provisions in the Stevedoring Industry Award were compared with those in four other awards: *National Building and Construction Industry Award 1990*, *Transport Workers Award 1983*, *Storage Services — General — Interim Award 1990* and *Metal Industry Award 1984*. These awards were selected for a variety of reasons (see appendix J). Workers covered by the Transport Workers Award in the transport industry, for example, are involved in moving containers and therefore undertake some similar tasks to those of stevedore workers.

Table 2.9: Summary of provisions specified in the majority of selected enterprise agreements[a]

Work arrangement	*Summary of provisions*
Manning	Describes manning levels for different types of operations
Redundancy	Specifies redundancy entitlements[b]
Contracting out	Sets limits on contracting out
Rostering	Explicitly sets the order in which different types of labour can be engaged on a daily basis Describes roster schedules for different operation areas Describes hours of work for different shifts Mentions equalisation schemes in passing but does not define their operating rules
Remuneration	Defines base weekly wages Details penalties rates as defined in the Stevedoring Industry Award Details productivity bonus schemes Details aggregate annual allowance in excess of Stevedoring Industry Award to all permanent employees Describes principles or method of wage payments
Paid non-working time	Specifies break lengths and timing Specifies most minimum payments for call-up and shift extensions Specifies various leave entitlements

a This table is a simplified summary of some provisions relating to work arrangements examined in this study, as specified in the majority of enterprise agreements examined. Thus, the provisions listed may not be specified in every agreement. For details see table J.3 and the agreements. Caution should be applied in the interpretation of this table, given the relationship between these provisions and the Stevedoring Industry Award (appendix J).

b Specified in retirement and redundancy agreements which are annexed to most agreements.

Source: Various enterprise agreements

While comparisons between award conditions in different industries should be treated with caution, several of the base provisions in the Stevedoring Industry Award relating to work arrangements examined in this study exceed those in the other awards examined. Employees under the Stevedoring Industry Award are entitled to an annual leave loading of 27.5 per cent, for example, compared with 17.5 per cent for employees under the other awards examined. Shift premiums are also usually higher: for example, the shift premium for stevedore employees for weekday nights is double ordinary time, compared with 1.5 or 1.3 times the ordinary rate under most of the other awards examined (table J.4).

There are a number of factors which mean that a simplistic comparison of award conditions applying to different industries may be misleading. Work arrangements may vary in practice, for example, from the award provisions. Furthermore, important links exist between award provisions, between provisions in specific enterprise agreements, and between the award and an

agreement. Such links are illustrated by those between provisions relating to shift premiums and penalty rates (in the Stevedoring Industry Award and enterprise agreements) and the order of engagement (in enterprise agreements). Thus, it is necessary to look beyond a simple comparison of award provisions to understand the operation and effect of various work arrangements. Other caveats are discussed in appendix J.

3 WORKPLACE CULTURE

Workplace culture affects how people respond to current work arrangements and how they develop future arrangements. It is a major influence on the ability of the workplace to adapt to change, thereby affecting performance. Adversarial relations between management and employees pervade most of the Australian container stevedoring workplaces examined. The culture is characterised by high levels of industrial disputes, poor occupational health and safety performance, limited internal communication and information sharing, lack of allegiance to the employer relative to the union, and concerns about management style and the prescriptiveness of enterprise agreements. But workplace culture is not uniformly poor at all workplaces.

Discussions at the workplaces examined indicated that workplace culture is a major influence on the ability of organisations to adapt to changes in industry conditions. But workplace culture is a difficult concept to define or measure. Culture can be thought of as a system of shared meanings or beliefs that distinguishes one group from another. It influences the group's priorities, its values and how these affect the behaviour of the group, including how it solves problems (Trompenaars 1993). Hofstede (1991) has observed that aspects of organisational culture, or people's 'shared mental software', are slow to change.

Today's stevedoring culture in Australia has been shaped by a long history of antagonistic industrial relations on the waterfront dating from the late 1890s (Beasley 1996). Some aspects of workplace culture in stevedoring may be difficult to change, but there is evidence that other aspects of workplace culture can be altered, and are even improving:

> Communication between employees and the different levels of management has improved considerably although there still is some sense of mistrust between management and employees. To some extent there has been a cultural shift whereby an individual employee is able to feel comfortable to approach the appropriate management person on an issue of concern. (Manager)

Notwithstanding these developments, the culture at the Australian workplaces examined in this study (with the exception of Sea-Land Adelaide) appears to be

still characterised by a high degree of mistrust between management and employees. As discussed in this chapter, this mistrust is evidenced by:

- high levels of industrial disputes;
- poor occupational health and safety performance;
- limited internal communication and information sharing; and
- concerns about managerial style and the prescriptiveness of enterprise agreements.

The culture of Australian container stevedoring workplaces and its development are briefly examined in this chapter as a backdrop to the review of particular work arrangements in subsequent chapters.

3.1 Brief history of employee and management relations in stevedoring

Workplace culture in container stevedoring today reflects the history of employee and management relations on the waterfront. According to Sheridan (1994):

> The history of waterfront labour relations had always been bitter. Only coal mining had a more disputatious history. Major port closures occurred in 1890, 1917 and 1928, each ending in crushing defeat for the strikers. In 1917 a 'scab' union in Sydney obtained registration ... Although the scab union soon began to wither on the vine, the 1930s were a bleak time for most wharfies. While men laid off in other industries queued at the dock gates in hope of a half-day's work, the employers ruled the roost. (p. 260)

Prior to mechanisation, stevedoring employees were faced with difficult workplace conditions. An industrial hygienist inspecting working conditions in Brisbane in 1956, when 45 kilogram bags of sand were being loaded, noted that:

> ... [the bags] are carried on the back just below the neck and are pushed or dropped into that position by a worker standing over the pile of bags onto the pallet. The process is crude and awkward and lacks any definite pattern of energy use and output but in spite of this the two tons are stacked [in] the hold in three to four minutes ... It is hard enough to stoop and pick up a hundredweight of sand. But on the pallets, workers have to have the bags dropped on their backs in the early stages and in the later they have to do eternal knee-bends sitting on their heels to get the bags on their backs and straighten up with a hundredweight of sand ... (Beasley 1996, p. 195)

Until the late 1960s, all stevedoring employees were hired on a casual rather than permanent basis. There was an industry-wide pool of labour which could be transferred by labour coordinators between workplaces and companies at

each port as required (appendix F). This method of employment, combined with strong union loyalty and militancy, engendered low levels of loyalty to stevedoring companies. It attracted employees who preferred irregular work and the ability to stay away from work without affecting their employment prospects.

Stevedoring managers, on the other hand, were usually former ships' officers who had 'a tendency to assert authority through physical confrontation', according to Sheridan (1994).

The irregular nature of work was one of the main causes of high labour turnover in the 1950s. Many local stoppages occurred during the 1950s and 1960s, mainly for better pay and conditions. In 1954 and 1956, there were major nationwide waterfront strikes. This resulted in legislative change, including penal sanctions and fines aimed at curbing union power.

Technological change in the 1960s, particularly containerisation, led to large job losses as work became more capital intensive. The requirement for a more skilled workforce encouraged employers to support the introduction of permanent employment — a policy of the Waterside Workers Federation of Australia aimed at improving conditions. As described by Kierce (1996):

> Permanent employment was introduced in 1967–69, following the National Industry Stevedoring Conference (Woodward Conference 1967) with the objective of achieving long term improvement in the conditions in the stevedoring industry. However, permanent employment did not bring about the industrial harmony contained in its objectives, in fact, the opposite may even be argued. (p. 12)

Sheridan (1994) noted that while the union supported permanency, a large minority of the union membership opposed the introduction of permanency out of fear that their earnings would be cut and a suspicion of anything their employers supported.

A key objective of the Waterfront Industry Reform Authority (WIRA) was to encourage employee loyalty to their employer as a means of improving productivity and innovation. Many claimed during the detailed workplace discussions that strong employee loyalty to the union remains, despite the WIRA process. The Port of Brisbane noted that this can affect workplace performance:

> The maritime unions actively foster commitment to the unions at the expense of the employers. This leads to a lack of commitment to the organisation and a less than ideal working environment. (response 14, p. 1)

Discussions with management also revealed that they perceive that there is still insufficient employee loyalty to the individual employer, although change has been occurring:

> There used to be no loyalty to the enterprise but this is changing. Changing that culture is a long-term process, but it has changed enormously. ... The aim is to continue to change this culture. (Manager)

Difficulties in establishing an appropriate workplace culture are not unique to Australia. In New Zealand, there is also a long history of adversarial relations between employers and employees. The reforms in New Zealand appear to be changing this situation, but slowly (appendix I).

3.2 Poor workplace culture

The culture in most of the Australian stevedoring workplaces examined is epitomised by a 'them and us' relationship between management and operational employees. Bill Giddens, National Industrial Officer of the Maritime Union of Australia (MUA), considered that the biggest problem in stevedoring is that:

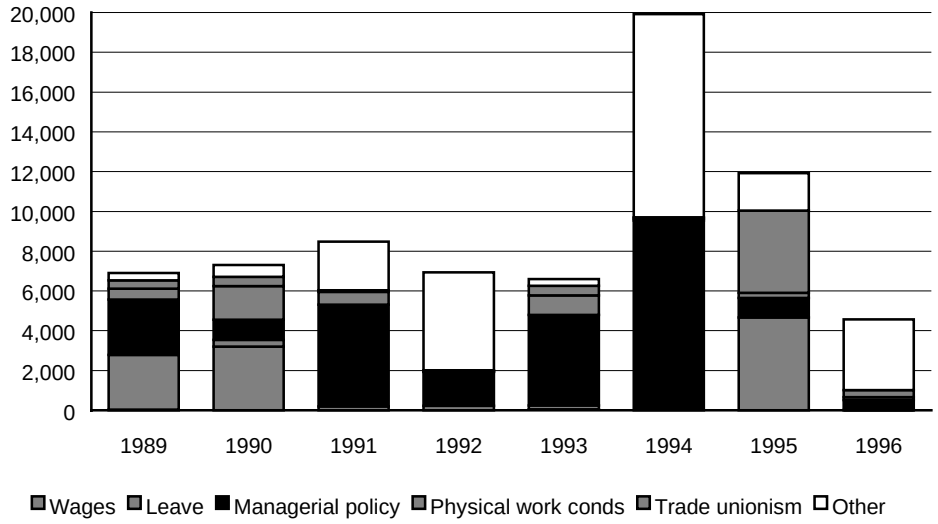
> ... we have management on one side demanding unfettered discretion to manage and the employees on the other side resisting every change that management try to make. ... The lack of communication and cooperation is one of the big problems keeping productivity from reaching acceptable levels. ... I think employees are very suspicious and I think there is not a high level of trust [of management]. (cited in Kierce 1996, pp. 120–128)

Some appreciation of the nature of the culture in stevedoring can be gained by briefly examining the nature and level of industrial disputes, occupational health and safety performance, internal communication, and managerial style and the prescriptiveness of enterprise agreements.

Causes of industrial disputes

Most stevedoring workplaces are characterised by high levels of industrial disputes, which are a major source of ship delays at Australian ports (PC 1998). The level of industrial disputation has fallen considerably over the past few years, but it is still high and is exceeded only by coal mining (chapter 2 and figure 3.1). Improved management and employee relations in stevedoring would increase stevedore performance by reducing ship delays and turnaround times.

Figure 3.1: Working days lost in stevedoring as result of industrial disputes by cause, 1989–96



Source: ABS, unpublished data from *Industrial Disputes Australia*, cat. no. 6321.0

Over the eight years to 1996, data from the Australian Bureau of Statistics[1] indicate that 'managerial policy' was one of the main causes of disputes in the stevedoring industry, accounting for a particularly large number of working days lost per employee in 1991, 1993 and 1994 (figure 3.1).

Another major cause of working days lost was disputation over wages. The number of working days lost in 1996 was considerably lower than during the previous two years. The relatively high number of days lost in 1994 was mainly a result of disputation over proposed redundancies at Patrick, Sydney (box 6.3).

Occupational health and safety

As discussed in chapter 2, stevedoring has the highest incidence of new cases of work-related injuries and the highest cost of injury per employee of all major industries in Australia (table 3.1). The average compensation per employee and the incidence of new compensation cases in the stevedoring industry are both significantly higher than in other industries.

1 Based on data obtained from employers and trade unions.

Table 3.1: Occupational health and safety indicators in stevedoring and other selected industries, average for 1991-92 to 1994-95

Industry	*Incidence of new cases*[a]	*Average duration*[b]	*Average cost of claims*	*Costs per employee*
	no.	weeks	$'000	$
Stevedoring	148.6	9.2	7.0	1061
Mining	64.9	8.7	8.4	547
Manufacturing	46.6	10.0	7.7	359
Construction	47.6	12.2	9.3	443
Transport and storage	47.7	10.2	7.5	361
All industries	**28.0**	**11.0**	**8.1**	**228**

a Number of new compensation cases per thousand employees.

b Working weeks lost per occurrence.

Source: Easson, McCann and Ronfeldt (1997)

Management has an important influence on occupational health and safety performance. An Industry Commission (1995) report observed:

> More than anything else ... risk management requires cultural change in the workplace. This must be driven by top management that is sufficiently committed to provide resources and hold line managers and work teams responsible for outcomes. (p. xi)

Easson, McCann and Ronfeldt (1997) argued that many of the injuries in stevedoring are avoidable and that a major contributor to poor occupational health and safety performance is the poor state of management and employee relations on the waterfront.

Internal communication

The MUA is the primary means of transferring information on strategic issues between managers and employees in many of the Australian workplaces examined. Almost all operational employees in container stevedoring are members of the MUA (chapter 2).

Unions, by providing a collective voice, provide a mechanism that may increase the flow of information between management and employees. Thus, employees are less likely to express their dissatisfaction by quitting (Elliott 1991). This suggests that in principle, unions may reduce recruitment and other associated costs of employment.

On the other hand, unions may not be able to fully reflect the sometimes diverse views of their membership. Managers at several Australian workplaces examined were concerned that information channelled through the union may be limited and potentially unrepresentative of the views of all employees.

There is no formal requirement stipulating that the employer must communicate via a union rather than directly with employees. The *Stevedoring Industry Award 1991* (clause 43) specifies that any major workplace change which has a 'significant effect' on employees must be discussed with 'employees *and/or* [emphasis added] their union/s'. Nevertheless, most but not all enterprise agreements of the Australian stevedoring workplaces examined explicitly provide a role for unions in information sharing. For example, both the CTAL Sydney and P&O Ports Melbourne agreements stated that:

> The parties shall provide on a regular basis accurate and comprehensive information to employees on a range of operational, industrial, personnel and organisational matters. Such information sharing shall be achieved through formal and informal means, eg team briefing, annual report, newsletters/magazines, day-to-day discussions and regular meetings with the Union Committee. (CTAL Sydney, clause 7.2, p. 3; P&O Ports Melbourne, clause 1.7, p. 5)

The enterprise agreement at Sea-Land is similar, but does not explicitly mention consultation with the unions. Instead, it refers to employee representatives, but these are typically union representatives:

> The parties recognise that it is essential to achieve a spirit of trust and cooperation between employer representatives and employee representatives, as required within the overall objectives of enterprise-based employment. (Sea-Land, clause 7a)

> The parties shall provide on a regular and systematic basis accurate and comprehensive information to employees on a range of operational, industrial, personnel and organisational matters. Such information sharing shall be achieved through formal and informal means, eg team briefing, the SLAT [Sea-Land Australia Terminals] Communication Committee, annual report, newsletters/magazines, day-to-day discussions and on-the-job discussions. (Sea-Land, clause 7d)

The Patrick enterprise agreements were less focused on the processes:

> It is the intent of this agreement to ... avoid division and conflict through grass roots communication, by providing the opportunity for employees to make contributions to decisions involving their work and their working environment and by fostering a mutually supportive relationship between management, all employees and the unions. (Patrick Melbourne and Brisbane, clause 6, p. 3)

The Patrick and Sea-Land enterprise agreements also prescribe the operation of communication committees. The Patrick agreements note that these committees

provide a forum for contribution to decision making relating to 'the objectives of the Company, the welfare of employees and levels of customer service provided' (Patrick agreements, clause 9, p. 4). The role of the committee is to facilitate these objectives through 'consultation, communication and understanding' (appendix J). The composition of Patrick's communication committees is prescribed in the agreements as 'management, supervisors, operational employees and union representatives'.

The Sea-Land agreement specifies the objectives of the communication committee as being 'to increase employees' contributions in the decision making process and to 'focus attention on the requirements of customers and the needs of employees and to improve site productivity'. Sea-Land's committee is specified to comprise eight members: 'six general members elected by fellow employees' and two management members (Sea-Land, annexure 1, p. 41).

P&O (CTAL Sydney and P&O Ports Melbourne) does not prescribe communication committees in the agreements examined, although P&O Ports Melbourne does have a Productivity Committee (which, while not specifically noting communication as an objective, provides for the transfer of information on performance). However, all agreements do prescribe an Occupational Health and Safety Committee, comprising employee representatives and management,[2] which provides a venue for communication on these issues.

The Stevedoring Industry Award contains a clause describing procedures which should be followed in the event of a dispute. Specific roles for union representatives are outlined. Unions and employers shall notify each other as soon as possible if they feel that any industrial matter may result in a dispute. In the event of a dispute at the workplace, the union delegate and supervisor must confer without delay and attempt to resolve the matter. If agreement is not reached, then there is facility for the dispute to be referred to a conciliator. The container stevedoring enterprise agreements have replicated this clause, without modification.

Various formal means of communication within the workplaces examined, such as newsletters, noticeboards and grievance procedures, are summarised in table 3.2. Formal processes to facilitate the sharing of information are in place at each workplace, but information on these processes does not indicate how these processes are used at individual workplaces, nor their effectiveness.

[2] The Patrick enterprise agreements examined do not prescribe the membership of the committee. Indeed, the committee is recognised as being important in the agreements, but its function is not detailed.

Furthermore, the importance of informal communication should not be overlooked.

Table 3.2: Methods of employee involvement and communication, by workplace examined, 1997[a]

	Sea-Land Adelaide	*CTAL Sydney*	*P&O Ports Melbourne*	*Patrick Melbourne*	*Patrick Brisbane*	*Fergusson Auckland*
Processes						
Communication committee[b]	yes	no	no	yes	yes	yes
– regularity	monthly	na	na	six-weekly	monthly	monthly
– direct participation[c]	yes	na	na	yes	yes	no
– union participation	yes	na	na	yes	yes	yes
OH&S committee	yes	yes	yes	yes	yes	yes
Workplace newsletter	yes	yes	yes	yes	yes	yes
Noticeboard	yes	yes	yes	yes	yes	yes
Grievance procedures	yes	yes	yes	yes	yes	yes
Information sharing						
– financial	yes	no	no	some	some	no[d]
– performance	yes	yes	yes	yes	yes	yes

a Table structure adapted from Callus et al. (1991).

b Committee names vary between workplaces, but are essentially a forum for information sharing between management and operational employees.

c Open to all employees, not just union delegates.

d Would like to share more financial information than they do now.

na Not applicable.

Source: Workplace information requests

It is difficult to measure the effectiveness of formal communication processes and, even more so, the extent of informal communication within the workplace. The detailed discussions with managers, supervisors and site committee representatives indicated that communication between employees and management could be improved at most workplaces. The discussions also suggested there were limited opportunities (except with Sea-Land Adelaide) for direct participation by employees in decision making. The internal communication processes at Sea-Land (considered in section 3.3) appear to be atypical of the workplaces examined.

Managerial style and the prescriptiveness of enterprise agreements

The high degree of mistrust between stevedoring managers and employees may be reflected in the preference by some managers for prescriptive enterprise agreements (appendix J). Prescriptive agreements provide a means of reducing day-to-day conflict with employees over work arrangements by reducing uncertainty about the interpretation of rules operating at a particular workplace. One manager commented:

> ... if unions claim an approach should be taken on any issue which does not conform with what the agreement may say regarding that issue then management will not accept it. (Manager)

But management, by agreeing to prescriptive agreements, has reduced its flexibility to improve workplace performance by altering work arrangements.

Supervisors (who are members of the Australian Maritime Officers' Union) were not involved in the development of enterprise agreements between management and the MUA at some workplaces. Supervisors considered that this reduces their flexibility when planning operations. This also limited the influence of supervisors over the development of work arrangements which directly affect their ability to select and reward staff.

Several managers recognised the difficult position of supervisors. One commented:

> Supervisors are going through traumatic times and will tell you that they are the meat in the sandwich. ... We need to address this. (Manager)

Several managers at the Australian workplaces examined expressed the view that operational employees did not feel responsible for their performance and that this was an important issue. Don Hughes, Manager, New South Wales Southern Region of Patrick, for example, noted that:

> We need accountability and responsibility in the workforce, now there is none of this. ... There is not a great deal of support from the union to increase business or improve the way we perform compared to the rest of the world. Shipping companies never know when a ship will return from Australia. We have industrial problems continually. (cited in Kierce 1996, p. 93)

But managers considered that it was extremely difficult in practice to dismiss poorly performing employees. They viewed it as a costly and protracted exercise, requiring detailed recording of an employee's breaches of their employment contract. This reduces the competition for jobs and the incentive for employees to improve performance. Disciplinary procedures, including dismissal procedures, are included in both the Stevedoring Industry Award and most stevedoring agreements (appendix J).

There also appears to be little incentive or reward for operational employees to undertake additional responsibilities. The position of foreman is rotated among gang members at some workplaces, for example, while operational employees at other workplaces can be upgraded for the duration of a single shift if there is a shortage of foremen.

The lack of effective rewards for improved performance and lack of effective sanctions against poor performance may also encourage the reliance of managers on prescriptive agreements.

3.3 Sea-Land

Sea-Land's workplace culture stood out among the Australian stevedoring workplaces examined. Sea-Land Adelaide is characterised by substantially more positive management and employee relations and good communication, as shown by one crane operator's view:

> I love my job. I take pride in my work. They put a lot of trust in us up there on a $15 million piece of equipment ... We hear about the other ports and all the arguments with management. We just don't have that here. If we have a problem we tell them and they listen. If we want something fixed they fix it. We work very closely with the mechanics. (MUA 1997b, p. 47)

Before establishing in Adelaide in 1993, the company's workplace culture was apparently similar to other stevedoring workplaces examined. An operational employee (MUA Branch Secretary) commented:

> Before Sea-Land set up in Adelaide it was a disaster. Morale was low, distrust was high and productivity was abysmal ... Management had no understanding. (MUA 1997b, p. 46)

The MUA Branch Secretary went on to note that when Sea-Land took over Adelaide's container terminal:

> ... [the General Manager] brought the team together, he went out of his way to get work for the terminal ... he instilled confidence in the workforce, there would not be a week go by when he doesn't walk into the smoko room to talk to people. (MUA 1997b, p. 46)

The different culture at Sea-Land Adelaide may be attributed to three factors. First, the degree of competition from Melbourne has increased since the establishment of Patrick's dedicated Melbourne–Adelaide rail link in 1997 (chapter 9). Supervisors at Sea-Land recognise that because Sea-Land is small and isolated, it will lose contracts if it does not perform. If Sea-Land refused a late container for loading, for example, then the exporter could easily send it by rail to Melbourne.

Second, Sea-Land's operations are small relative to stevedores at Sydney and Melbourne. This could be expected to facilitate communication between management and employees.

A third factor is the apparent difference in management style relative to the other Australian workplaces examined, as shown by the following comments:

> We took a different approach. We listened. Good communication is 50 per cent listening. I had a lot to learn. Management is a learning process. You can't go by the book. But I've found if what you do is good for business it's usually good for everyone else too. (General Manager, Sea-Land, MUA 1997b, p. 46)

And:

> The only reason we are doing well is because of the people we have working here. ... Nothing is perfect and I say to everyone that, 'we are not necessarily doing everything right'. I tell the younger people that if they want a job for life they need to make it. (Manager)

The greater level of information sharing and direct communication with employees is illustrated by the functioning of the communication committee. All employees are encouraged to attend meetings of this committee, and financial issues and other information are openly discussed (see also box 3.1). The approach of management to this committee is conveyed by the following comment by the General Manager of Sea-Land during the detailed discussions:

> At the end of meetings we have financial presentations of performance and anyone can go along. It's open to questions, scrutiny, costings, whatever. All the rumours are thrown on the table.

The General Manager noted that the better workplace culture, compared with other workplaces, was reflected in fewer sick days and industrial stoppages because problems are more likely to be resolved before they become major issues.

The example of Sea-Land suggests that certain aspects of waterfront culture are affected by the environment in which stevedores operate. The degree of competition and management style, particularly the extent of internal communication, appear to have improved the workplace culture at Sea-Land. Moreover, as Bill Giddens of the MUA has observed, cultural change at Sea-Land was achieved with the existing employees:

> It is interesting to note that a new player in the field in the last seven or eight years, Sea-Land terminal in Adelaide, has the same employees that the previous company Conaust had, but they seem to have a far better relationship. (Kierce 1996, p. 128)

Box 3.1: Sharing financial and other information — Sea-Land

At Sea-Land Adelaide, the General Manager and the accountant provide detailed information on the costs, profits and rate of return of the container terminal at the communication committee (Site Consultative Committee). Any employee may attend these meetings and a range of grades of permanent employees attend, as do guaranteed wage employees. At Sea-Land, employees who attended the meetings of the communication committee have discussed matters such as:

- the budget, including the profitability of the terminal;
- the concept of return on investment. (For example, new straddles were not purchased because it was found that the expected revenue from the straddles would not justify their cost); and
- reasons for stevedoring contracts being either won or lost by Sea-Land.

An example of the benefits of information sharing was the idea from crane maintenance staff to change some of the constraints on cranes to make them operate faster. Productivity for one crane went up three or four moves per hour using the same driver and machinery.

Sources: MUA (1997b); detailed discussions at Sea-Land Adelaide

3.4 Summary of findings

Workplace culture is a major influence on the ability of organisations to adapt to changes in industry conditions. The ability of a workplace to adapt includes its capacity to alter work arrangements in response to change. Some aspects of workplace culture may be difficult to change, but there is evidence that the workplace culture in container stevedoring can be improved.

Adversarial relations between management and employees pervade most of the Australian container stevedoring workplaces examined. This is manifested in:

- high levels of industrial disputes;
- poor occupational health and safety performance;
- limited internal communication and information sharing (with the union being the primary means of transferring information between managers and employees);
- primary allegiance by employees to the union rather than the employer; and
- a managerial style based on prescriptive enterprise agreements.

However, there is some evidence of improvement, such as better communication between employees and managers, at most of the workplaces examined.

In particular, Sea-Land Adelaide is characterised by more positive management and employee relations. Several factors appear to have contributed to the improved workplace culture, including the greater level of information sharing and direct communication between employees and managers. Other factors have also facilitated change, however, particularly the recent increase in competition from the Port of Melbourne and the workplace's small size compared with operations in Sydney and Melbourne.

4 ROSTERING

Roster systems are crucial to the performance of container stevedoring workplaces. Irregular shifts, overtime shifts, guaranteed wage employees and supplementary employees are used by stevedores to meet variable demand. When allocating employees to shifts, stevedores face constraints such as the order of engagement and equalisation schemes. The order of engagement, in particular, results in greater use of permanent employees and overtime than might otherwise be the case, which leads to lower productivity and higher labour costs. Stevedores have partly reduced the impact of this constraint by complicated roster design.

Shiftwork in Australian container stevedoring workplaces is a response to customer demands that a ship be worked 'around the clock' until the task of loading and unloading the ship (that is, the exchange) has been completed. This demand reflects the substantial daily costs associated with ships remaining in berth or anchorage.

Roster systems are the mechanism which supply labour when required to operate container terminals on a continuous basis — that is, 24 hours a day, seven days a week. These systems need to provide enough flexibility to meet an often variable and unpredictable workload — a particular characteristic of Australian ports (chapter 2). The stevedore's task is to match the available labour and equipment to the variable workload. As noted by Robinson and Everett:

> The most critical issue in determining productivity levels for stevedoring firms in container handling operations is how effectively the firm deals with, or manages, variability in demand — how effectively it allocates its labour and capital inputs. (response 10, p. 5)

However, stevedores face several constraints in allocating employees to shifts to provide an appropriate supply of labour under such conditions.

This chapter examines the rostering arrangements applying to operational employees at selected Australian container stevedoring workplaces.[1] It covers: the main features of roster systems; the key constraints on these systems; and

[1] Some workplaces have separate rosters for maintenance employees. Several workplaces also have separate rosters for gatekeepers, gear storemen, reefer attendants and allocators.

ways in which stevedores can reduce the impact of these constraints. Shiftwork and occupational health and safety issues are also addressed.

4.1 Main features of roster systems

As noted, stevedores need to be able to allocate their labour and capital resources to meet fluctuations in demand. Permanent employees, who are allocated to rosters, are used to meet normal workloads. Above-normal workloads are met in two main ways: permanent employees working overtime; and the use of guaranteed wage employees and supplementary employees. The latter two groups of employees are not allocated to rosters.

The first step in roster design is to decide on the main elements of the roster system. These include:

- shift times and length (for example, eight-hour shifts);
- types of shifts (such as regular, irregular and rostered-off shifts);
- the length of the roster cycle (that is, the number of weeks before the roster repeats itself); and
- weekday and weekend coverage (for example, making weekend work a rostered shift or a voluntary overtime shift).

The second step is to estimate the expected average daily labour requirements for the workplace. To calculate labour requirements in terms of person shifts[2] per day, the following information is needed:

- the expected average daily level of demand for stevedoring services (that is, container throughput);
- the number of shifts per day and shift length;
- the expected average crane productivity per shift (that is, the number of containers moved per crane per shift);
- the quantity and type of equipment (that is, the number of quay cranes, straddle carriers or rubber-tyred gantries); and
- typical manning scales on equipment and for other tasks.

The third step is to estimate the total number of operational employees required to operate the workplace on a shiftwork basis. The total number of person shifts

[2] A unit of measurement of labour input. For example, ten employees each working one shift is equivalent to ten person shifts (or 80 person hours assuming a shift length of eight hours).

required is then distributed between permanent employees, guaranteed wage employees and supplementary employees.

In the case of permanent employees, allowance must be made for the expected take-up levels of leave entitlements (such as annual and sick leave) and rostered time off. The availability of guaranteed wage employees is also affected by leave entitlements. The level, mix and use of different types of employees are determined at the individual workplace.

The final step in roster design is to assign permanent employees to different shift types. The main shift types are day, evening, night, irregular, variably rostered and rostered off. Permanent employees are divided into panels — one for each week of the roster cycle. Each panel is usually assigned to a particular shift type for the week. Panels rotate to a different shift type on a weekly basis over the roster cycle. Employees on regular panels work their predetermined shifts — for example, employees assigned to day shift will work day shifts over that week. However, employees on irregular shifts may be assigned to the day, evening or night shift depending on requirements. Employees on variably rostered shifts may be assigned to one of two shift types (for example, evening or day).

The proportions of regular, irregular and other shifts are negotiated at the workplace level and are specified in enterprise agreements. For example, the enterprise agreement at Sea-Land Adelaide specifies each shift type as a proportion of total shifts for weekdays and weekends over the 15 week roster cycle (table 4.1).

Table 4.1: Shift types over roster cycle, Sea-Land Adelaide (per cent)[a]

		Weekends	
Shift type	*Weekdays*	*Saturday*	*Sunday*
Day	20	..	..
Evening	13	..	..
Irregular	53	33	..
Rostered off	13	67	100

a The number of shifts of a given type (for example, day shift) as a percentage of total shifts for weekdays and weekends.

.. Nil.

Source: Sea-Land Enterprise Agreement (1997)

A further consideration in allocating permanent employees to panels is the need for the full range of skills required to perform stevedoring functions to be available on any given day.

If actual workplace variables, such as productivity or take-up rates of annual leave or sick leave, differ significantly for a sustained period from the levels expected, labour requirements (and possibly manning levels) may need to be re-estimated. The roster may also need to be adjusted until it supplies a sufficient amount of labour with an appropriate distribution of skills. For example, if productivity is much lower than expected, then shortages of permanent employees will arise because more person shifts are required than the roster supplies.

Similarly, there would be insufficient permanent labour if employees' take-up of annual and sick leave increased substantially. Employee absenteeism can also affect labour supply and workplace performance. For example, in detailed discussions, management at one Australian workplace noted that a high level of failures to report were occurring early in the week. This required a scaling back in operations, because fewer drivers than expected are available to operate equipment, and may also result in double headers.

If such changes are expected to be sustained, and in the absence of measures that directly address the source of change, roster and manning adjustments may be considered necessary. Provisions in enterprise agreements require that management and the union consult and negotiate any changes to roster and manning arrangements at the workplace level.

The roster system at Patrick Brisbane is outlined in box 4.1 to illustrate how these elements come together.

4.2 Constraints on roster systems

The *Stevedoring Industry Award 1991* contains provisions relating to shiftwork and roster design: hours of work (clause 18); shiftwork (clause 20); rostering (clause 21); overtime (clause 22); double headers (clause 23); annual leave (clause 27); and sick leave (clause 28). These provisions are outlined in appendix J.

The detail of roster systems is now determined at the workplace, but award provisions continue to influence the design of roster systems. The enterprise agreement at Patrick Melbourne, for example, refers to the award provisions for a nine-hour break between the conclusion of overtime work on the evening shift

Box 4.1: Roster arrangements at Patrick Brisbane

Machinery operators/general duties employees at Patrick Brisbane work an eight-week roster cycle (table below). The shift length at Patrick Brisbane is eight hours on weekdays and seven hours on weekends. To average 35 ordinary hours per week over the roster cycle, employees are entitled to five rostered days off which are taken consecutively in week 8. Employees are not permitted to work when rostered off in that week.

Roster for operational employees, Patrick Brisbane

Week	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
1	E/D	E/D	E/D	E/D	E/D	V	V
2	D	D	D	D	D	V	V
3	I	I	I	I	I	V	V
4	D	D	D	D	D	V	V
5	I	I	I	I	I	V	V
6	D	D	D	D	D	V	V
7	I	I	I	I	I	V	V
8	Off	Off	Off	Off	Off	V	V

Notes: E = evening, D = day, I = irregular, Off = rostered off, V = voluntary overtime

Over the roster cycle, employees work a mix of regularly rostered day shifts and irregularly rostered shifts as well as a week of variably rostered shifts. Machinery operators/general duties employees are divided into eight 'panels', one for each week of the roster. Each panel commences the roster cycle at a different point to equally distribute employees over the roster. Each panel then rotates to a different shift type on a weekly basis.

Regular day shifts are worked in weeks 2, 4 and 6. In week 1, a variably rostered employee may be allocated either to the evening or day shift, but is normally allocated to the evening shift if there are vacancies on that shift. Employees working in an irregular roster week (weeks 3, 5 and 7) may be allocated to any shift each day (subject to having an eight-and-a-half hour break between shifts). The normal order of allocation for irregularly rostered employees is to fill available vacancies on night shift, then evening shift and then day shift.

On any given weekday there will be about 38 per cent of machinery operators/general duties employees rostered onto a day shift, about 13 per cent variably rostered to either a day or evening shift, about 38 per cent rostered on an irregular basis and around 13 per cent rostered off.

All weekend work by machinery operators/general duties employees at Patrick Brisbane is performed on a voluntary basis and paid at overtime rates.

Source: Patrick Brisbane Enterprise Agreement (1996)

and the start of work on the following day. As a result, shift times have been structured to provide for a nine-hour break. Similarly, the award provision prescribing the average weekly hours of work for permanent employees affects rostered time-off arrangements.

The enterprise agreements of the Australian workplaces examined contain several work arrangements that, as currently designed, constrain how management can allocate employees to shifts on a daily basis. These include:

- the order of engagement;
- equalisation schemes;
- notification requirements; and
- rostered time off.

The way in which several of these arrangements currently operate result in higher levels of permanent employees than would otherwise occur and limit the use of supplementary employees. This can have the effect of increasing the overall cost of labour and may be contributing to reduced productivity.

Order of engagement

The order of engagement specifies the order in which employees are engaged for a shift. The order of engagement (also known as the 'order of pick') is prescribed in the enterprise agreements of all the Australian workplaces examined.

A typical order of engagement for weekdays is illustrated in table 4.2. Regularly rostered permanent employees (1st pick) must be allocated first for any particular shift. If no regularly rostered permanent employees are available, then variably rostered permanent employees (2nd pick) are allocated. If no variably rostered permanent employees are available, then irregularly rostered permanent employees (3rd pick) are allocated. This allocation process continues down the order of engagement until the shift has the required number of workers. Importantly, the weekday order of engagement gives preference to permanent employees working double headers (5th pick) before supplementaries (7th pick) are engaged.

The order of engagement, as described above, applies at most of the Australian workplaces examined. An exception is CTAL Sydney where the weekday order of engagement allows the use of supplementary employees before permanent employees are engaged to work double headers. This arrangement was introduced at CTAL as part of the Productivity Employment Programme in 1996. However, the supplementary pool accounts for less than 10 per cent of the

workforce at CTAL Sydney and recruitment of new supplementary employees appears to be limited (chapter 5).

Table 4.2: Weekday order of engagement, Patrick Melbourne

1st pick	Regularly rostered permanent employees (evening, day)
2nd pick	Variably rostered permanent employees (midnight/irregular, evening/day, day/evening)
3rd pick	Irregularly rostered permanent employees (normal order of allocation: midnight, evening, day)
4th pick	Guaranteed wage employees to limit of guarantee[a]
5th pick	Permanent employees working double headers (limit to two nonconsecutive)
6th pick	Guaranteed wage employees beyond guarantee[a]
7th pick	Supplementaries
8th pick	Permanent employees working additional double headers
9th pick	Guaranteed wage employees and supplementaries working double headers

a Guaranteed wage employees at Patrick Melbourne are guaranteed payment of 15 hours ordinary time (two shifts) wages per week.

Source: Patrick Melbourne Enterprise Agreement (1996)

Each Australian workplace examined has a separate order of engagement for weekends. This usually gives preference to permanent employees working additional shifts (beyond their rostered weekday shifts) before guaranteed wage employees and supplementary employees are engaged.

The order of engagement primarily reflects the union's preference for maximising the work and earnings opportunities of permanent employees. Robinson and Everett noted that:

> Union policy has underlined the position that the Australian waterfront should be manned by a permanent, fully-trained and responsible workforce; and that most, if not all, work should be carried out by that group. The use of supplementary labour ... is therefore seen to be undesirable. (Less formally, there is also a strong view which sees [supplementaries] — often former waterfront labourers made redundant — as 'double-dipping' and no longer requiring or deserving of employment.) (response 10, p. 10)

Given that the use of ex-industry employees[3] as supplementaries is likely to have generated resentment among permanent employees, the union may have moved to limit the use of supplementary labour by negotiating the order of engagement in the initial round of enterprise bargaining.

The order of engagement affects workplace performance by restricting the flexibility with which labour can be used. In particular, the use (in terms of shifts worked per week) of supplementary labour is limited by its low ranking in the order of engagement. As a result, management is constrained from engaging daily labour in the most cost-effective mix or the most appropriate skill mix to meet organisational requirements.

The order of engagement, combined with high shift premiums and penalty rates, substantially increases the cost of labour at most of the Australian workplaces examined. This occurs because it accords permanent employees preference to double headers and voluntary weekend overtime rather than using supplementary employees who would not be paid the overtime rate on double headers.

Using double headers (box 4.2) is more costly than engaging supplementary employees — for example, a permanent employee working a double header into a weekday evening shift is paid at two-and-a-half times the ordinary rate compared with a supplementary employee being paid one-and-a-half times the ordinary rate plus 20 per cent (see chapter 7 for a more detailed discussion).

Additional labour costs are also incurred by the stevedore through rostered time off and leave entitlements for permanent employees. These arrangements, by reducing the number of days for which a permanent employee is available to work each year, inflate the number of permanent employees needed to meet operational requirements (see chapter 5 for a discussion of manning levels).

The order of engagement limits the ‘on the job’ experience of supplementary employees which in turn slows their skills development. In addition, management may be prevented from selecting strongly performing employees from the supplementary pool because work preference must be given to permanent employees.

Double headers also involve higher levels of worker fatigue which can affect productivity and employee health and safety (chapter 7). The work performance and alertness of employees could normally be expected to decline in the second

[3] This refers to former permanent employees who received redundancy packages under the Waterfront Industry Reform Authority process.

Box 4.2: Double headers

Double headers, the working of two shifts consecutively (predominantly the day shift followed by the evening shift), were included in the Stevedoring Industry Award. The award (clause 23) limits the number of double headers to two per week and specifies that these may not be worked on consecutive days. Double headers are worked at penalty rates of up to three times the day shift rate, time off is given in lieu and provisions in the award require the taking of a paid one hour meal break between shifts.

Double headers are one way for workplaces to meet labour requirements (in terms of quantities as well as skills) in periods of high demand. The other option is to use guaranteed wage employees and supplementary employees.

All enterprise agreements examined include provisions for double headers, generally reflecting the provisions of the award. Depending on skill availability, operational employees can be required to undertake up to two double headers in a week. However, there are some variations from the award, for example:

- under the enterprise agreements at Sea-Land Adelaide and P&O Ports Melbourne, an employee working a double header shall not be required to operate heavy equipment on both shifts of a double header (subject to skill availability); and
- the enterprise agreements of P&O Ports Melbourne and CTAL Sydney may require employees to work additional double headers (more than two per week) or consecutive double headers to meet operational and skill requirements. The P&O Ports Melbourne agreement also states that there shall be consultation between the parties before additional or consecutive double headers are worked.

Sources: Stevedoring Industry Award; enterprise agreements; workplace information requests

shift of a double header. Employees who work long hours are more likely to experience fatigue and are said to be more prone to injury and ill-health.

Shift premiums and penalty rates may create the incentive for permanent employees to work at a slower pace on rostered shifts to generate overtime opportunities. This would result in reduced productivity and timeliness. Also, the levels of rostered time off and leave increase the number of permanent employees required to operate a terminal.

The working of overtime on a regular basis can have deleterious effects on the lives of employees and their families and friends. According to the Maritime Union of Australia, 'working rotating shifts and double headers (two shifts in one day) is taking its toll on the personal life of stevedoring workers ...' (MUA 1994b, p. 10). Employees who consistently work overtime shifts spend more

time 'on the job' and therefore have less time to devote to other activities during working weeks. The rotational roster system (that is, the weekly rotation of shift types) means that, during certain weeks of the roster cycle, employees' leisure time may not coincide with that of their family members and friends.

At Fergusson Terminal in New Zealand, there is no formal order of engagement. However, permanent employees are allocated five shifts per week and are given preference over casual employees[4] to work an additional three shifts a week before casual employees are engaged. The stevedore is limited, by agreement, to using casual employees to a maximum of 25 per cent of the payroll.

One way in which Australian stevedores are reducing the impact of the order of engagement is by changing the order of allocation of irregularly rostered employees to particular shifts. Irregularly rostered employees at some workplaces normally fill positions on the night shift in the first instance, then the evening shift. Some of these workplaces also allocate a number of irregularly rostered employees to the day shift to reduce the incidence of employees working a double header into the evening shift (section 4.3). The number of double headers could be further reduced if managers could allocate irregularly rostered employees to any shift as required.

In summary, the order of engagement leads to higher labour costs and lower productivity than would be the case in its absence, other things being equal. It adds to labour costs by generating overtime shifts for permanent employees. Labour costs are also increased through the combination of the order of engagement, rostered time off and leave entitlements. These arrangements combine to inflate the number of permanent employees needed to meet operational requirements. Productivity is affected in other ways too. Relatively high shift premiums and penalty rates (see chapter 7), combined with the order of engagement, may create an incentive for employees to slow the work rate. Double headers involve higher levels of worker fatigue, which can affect not only productivity but also employee health and safety. The order of engagement may also prevent workplaces from engaging the most appropriate mix of employees and skills.

[4] Casual employees at Fergusson Terminal are defined as workers employed for one shift with no guarantee of any further work. All their entitlements are rolled into their wages. Casual employees are paid NZ$12.50 per hour, compared with permanent employees who are paid NZ$21.70 per hour.

Equalisation schemes

The objective of equalisation schemes is to equalise earnings across permanent operational employees within functional categories by ensuring that they have equal access to shifts which pay above the ordinary rate of pay (day shift base rate). These premium and penalty shifts include evening, night and overtime shifts (double header and weekend shifts). Each shift is given a point weighting according to its remunerative value. Shifts are allocated so employees within functional categories have the same points — and hence the same earnings — by the end of each assessment period. Permanent operational employees with lower points generally have first access to the next premium or penalty shift. Some workplaces limit variation in points between employees during the equalisation period to be within specified bands. For example, the Patrick Melbourne Enterprise Agreement 1996 states that 'a tolerable range of 30 points "either side" shall apply ...' (clause 28).

When first introduced, such schemes provided for the equalisation of work opportunities, earnings and location of work in stevedoring. Equalisation of earnings became part of the stevedoring industry with the introduction of the rotary gang system in 1944 under the casual labour system, and was retained when permanent employment was introduced in 1967 (Beasley 1996).

Equalisation schemes continue to operate at several of the Australian workplaces examined. The schemes are not part of the Stevedoring Industry Award; some enterprise agreements refer to equalisation schemes but provide few or no details on their operation. The schemes create an equality of earnings between permanent operational employees in each functional category.[5] In some workplaces, there are also arrangements to equalise the earnings opportunities of guaranteed wage employees and supplementary employees.

The aggregate wage scheme at Sea-Land Adelaide and the average weekly rate paid at CTAL Sydney — like the equalisation schemes in the other workplaces examined — also equalise earnings across permanent operational employees within functional categories. The aggregate wage scheme at Sea-Land assumes that a set amount of shifts — on which premiums and penalties are paid — are worked within the year (chapter 7). Fergusson Terminal does not operate an equalisation scheme, but there is an informal understanding that work will generally be equalised.[6]

---

[5] The main functional categories include: foremen, clerks, tradesmen and employees operating equipment, performing lashing work and undertaking other duties.

[6] If hours worked are generally equalised and the same hourly rates apply to all shifts, it follows that earnings will also be equalised.

From an employee perspective, equalisation schemes are intended to maintain the morale and motivation of the permanent workforce by distributing earnings opportunities in an equitable manner. The Maritime Union of Australia has also stated that:

> The pay equalisation scheme is not an impediment, there are some good reasons for it. If you work the best drivers all the time you will burn them out and other drivers don't get enough hours and therefore lose their skills, so there are pros and cons to the scheme. But I would prefer to have the fresh driver. By having equal opportunity for everybody, everybody gets the hours and experience they need to get better at it. If a driver sees other drivers getting more hours and working overtime when he is not even working all his rostered time he will not bother trying ... (Kierce 1996, p. 116)

Equalisation schemes may bolster the motivation of those employees who support the notion of sharing work and earnings opportunities irrespective of individual efficiency, and may serve to broaden the skill base. However, equalisation schemes may also act as a disincentive for employees to improve their work effort and quality because there is no pecuniary reward for doing so; in which case, productivity would be below its potential.

Equalisation schemes can limit management's ability to allocate the appropriate labour to shifts and tasks — for example, the stevedore may not be able to 'pick up' the most skilled and experienced drivers because they have high points. The shift may proceed with less skilled and experienced employees, or the operation may be scaled back (that is, less equipment and fewer employees). In either case, productivity and timeliness would be adversely affected.

Factors that influence the binding effect of equalisation schemes include the length of assessment periods, the extent of points variation allowed and management prerogative.

Assessment periods vary among the Australian workplaces examined. Earnings at Patrick Melbourne, for example, are generally equalised over a 15 week period; the equalisation period is eight weeks at Patrick Brisbane. The enterprise agreement of P&O Ports Melbourne states that:

> WSCD [West Swanson Container Division] shall provide general equity of work opportunities amongst permanent employees of the same category and skill levels over the period of each financial year. (P&O Ports Melbourne Enterprise Agreement 1996, clause 3.2.3)

The longer assessment periods mean that equalisation is less restrictive on labour allocation.

Most enterprise agreements emphasise that a degree of managerial prerogative applies in allocating labour to tasks. For example, the Patrick Brisbane enterprise agreement states that:

> Equalisation of earning opportunities within functional categories shall be attempted to the extent possible; *however the Company reserves its right to select employees outside the equalisation system for genuine circumstances after consultation with the Union* [emphasis in original document]. (Patrick Brisbane Enterprise Agreement 1996, clause 27)

It is difficult to ascertain the extent to which managerial prerogative is applied in practice. Several participants indicated that management does exercise its prerogative in specific circumstances, such as when an exchange must be finished quickly.

In detailed discussions, management indicated that equalisation schemes are less of a constraint than in the past. This is because: equalisation occurs over longer assessment periods than previously; some variation in points is permitted during assessment periods; and there is a capacity to override equalisation in specific situations. Despite these mitigating factors, equalisation schemes can still affect management's ability to allocate the most appropriate labour to particular shifts and tasks.

Notification

Notification refers to when and how employees are notified about upcoming work. The length of time between work notification and work commencement is a matter for negotiation. A longer notification period requires greater forward planning by management. However, the variable demand faced by stevedores makes forward planning difficult. On the other hand, a short notification period places a greater burden on employees (especially irregularly rostered employees) and their families by increasing the difficulty of scheduling their time away from work and the associated costs of uncertainty.

Notification arrangements for weekdays and weekends are contained in enterprise agreements (table 4.3). There is little variation between the notification provisions at the Australian workplaces examined. Supplementary employees may be called at shorter notice (for example, on the day of requirement) than that given to permanent employees to meet labour shortfalls.

Notification provisions at Fergusson Terminal provide employees with one day's notice of the shift they are required to work and there is no difference between weekend and weekday notification arrangements.

Unexpected ship delays can result in a 'walk-up start' (that is, the required labour is ready to work but the ship has not arrived) and idle time. In the case of walk-up starts, employees receive call-up payments and may be reallocated to the subsequent shift (chapter 8).

Table 4.3: Notification requirements at Australian workplaces examined

Type of work	*Notification provisions*
Allocation to shift on following weekday	Orders are generally posted by the end of the day shift, or by the end of the shift being worked for allocation to shifts on the following day. All stevedores have a call-in telephone service which employees are able to use in the afternoon (after about 4.30 pm) to be advised of their shift and place of work for the following day.
Shift extensions	All stevedoring enterprise agreements provide for the extension of shifts — sometimes up to 2.5 hours. Employees must be notified about the extension of a shift between 2.9 and 3.8 hours before the shift ends.
Weekends	Notification for work on weekends is generally advised on the Friday afternoon shift between 2 pm and 4.30 pm, or by telephoning after that time.
Double headers	Employees are generally to be notified of double headers by the meal break (in the day shift, this is about 12 pm) for the requirement to work the next shift.

Source: Enterprise agreements

The risk of walk-up starts and idle time is generally higher at smaller workplaces and on weekends. Larger workplaces have a lower risk of walk-up starts because they typically have a steadier flow of ships and work. The higher risk of walk-up starts and idle time on weekends reflects the longer forward planning period. Under *weekday* notification, stevedores generally requisition labour by the end of the day shift for the three shifts on the following day. Under *weekend* notification, stevedores must predict on Friday morning the labour requirements for the shifts over the weekend and, in some cases, day and evening shifts on Monday. That is, labour is requisitioned in advance for six to eight shifts.

However, at the planning meetings on Friday morning, stevedores may have little information on ship arrival times and container loads, but are still required by the notification provisions to requisition labour. Management noted that this can often result in substantial paid non-working time. In a response to the Research Issues Brief, for example, Liner Shipping Services noted that:

> ... one member Line has expressed concern at one of the restrictions arising from the roster system for labour on the waterfront whereby the ordering of labour by

> shipowners can result in idle time when the vessel is delayed by weather or slow work in the previous port. (response 7, p. 3)

The costs of walk-up starts and idle time would be reduced if Tuesday to Friday notification arrangements were also applied to weekend and Monday shifts. Alternatively, these costs would be reduced by the use of more supplementary labour.

Some Australian workplaces have gained limited flexibility in notification provisions when a public holiday falls on a Monday. The enterprise agreements of Patrick terminals in Brisbane and Sydney, for example, include provisions for shift cancellations on Sunday afternoons in the case of 'suspect vessels' (those ships not in port by the time of Friday's allocation) on long weekends.

Rostered time off

The accumulation of rostered weeks off at the Australian workplaces examined is related to:

- the length of shifts and the ordinary hours of work; and
- the working of rostered weekend shifts.

The Stevedoring Industry Award specifies that the ordinary hours of work shall average 35 hours per week for a permanent employee (clause 18). In practice, a permanent employee usually works more than 35 hours a week (chapter 7). Most of the Australian workplaces examined operate shifts of seven-and-a-half hours, so the time worked in excess of the standard seven-hour day (based on the 35 hour week specified in the award) accumulates towards rostered weeks off. Permanent employees at most of the workplaces also accrue time towards rostered weeks off by working rostered weekend shifts (chapter 8). Hence, over a seven-week period, permanent employees generally accumulate sufficient time for a rostered week off. This is usually taken in every seventh or eighth week of the roster cycle.

Additional employees are required to cover for those permanent employees taking rostered time off or leave. This link is acknowledged by the Maritime Union of Australia:

> The more members who opt for time off under RTOs[7], or pursuant to the award provision for accumulating leave for the second double header, instead of working excessive overtime, the more people will be recruited to the waterfront. (MUA 1994a, p. 6)

[7] Regulated time off was an optional 'time away from work' scheme adopted at Conaust, White Bay, Sydney in 1994.

While there are some rostered shifts on weekends, permanent employees at the Australian workplaces examined are not rostered to work the majority of weekend shifts. Instead, the workplaces rely mainly on voluntary overtime to supply labour on weekends — that is, employees indicate whether they are willing and available to work on the weekend. Allocation to weekend shifts is subject to the order of engagement and equalisation schemes.

Time away from work (that is, guaranteed and allocated days off) is arranged quite differently at Fergusson Terminal under the 'five over seven' roster (box 4.3). Advantages of this system include higher employee availability and greater flexibility to allocate labour than at the Australian workplaces examined.

Box 4.3: The 'five over seven' roster at Fergusson Terminal

Employees at Fergusson Terminal work to a 'five over seven' roster, working any five days over a seven-day period. The roster runs over a four-week cycle. In each four-week period, an employee is entitled to eight days off (four are 'guaranteed' days off and four 'allocated' days off).

Prior to a four-week period, an employee applies for four guaranteed days off over the period. Guaranteed days off are taken as a maximum of two days in any week and are approved subject to 80 per cent of the workforce being available on any weekday and 65 per cent being available for weekends and public holidays. Once approved, the guaranteed days off are not varied except at the employee's request.

The stevedore selects the allocated days off. Employees are advised by 5 pm for the following day. Wherever possible, the stevedore selects the day before or the day following a guaranteed day off, according to the employee's preference.

Source: Workplace information request

4.3 Reducing the impact of constraints

Constraints on the design of roster systems were identified in the previous section. In this section, various means of reducing the impact of these constraints are discussed, including increased use of irregular shifts and alternative shift lengths.

Irregular shifts

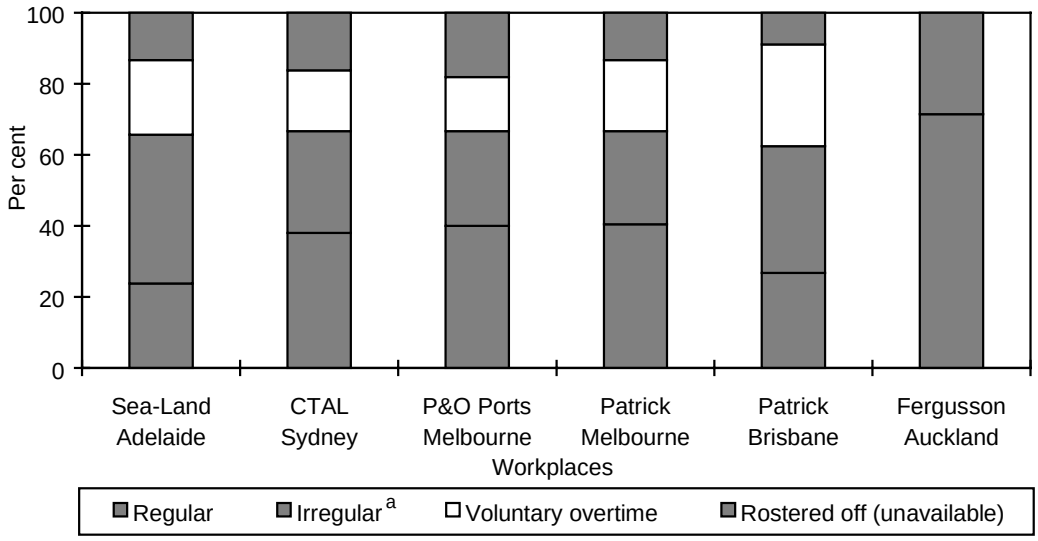
As noted earlier, employees on irregular shifts can be assigned to the day, evening or night shift, depending on the expected requirements for the particular

day. Increasing the use of irregular shifts can reduce the incidence of idle time and overtime.

The mix of regular and irregular shifts varies between the workplaces examined (figure 4.1). There are pronounced variations between:

- smaller and larger Australian workplaces; and
- the Australian workplaces and Fergusson Terminal, New Zealand.

Figure 4.1: Shift types over roster cycle for operational employees



a 'Irregular' includes irregular shifts and variably rostered shifts.

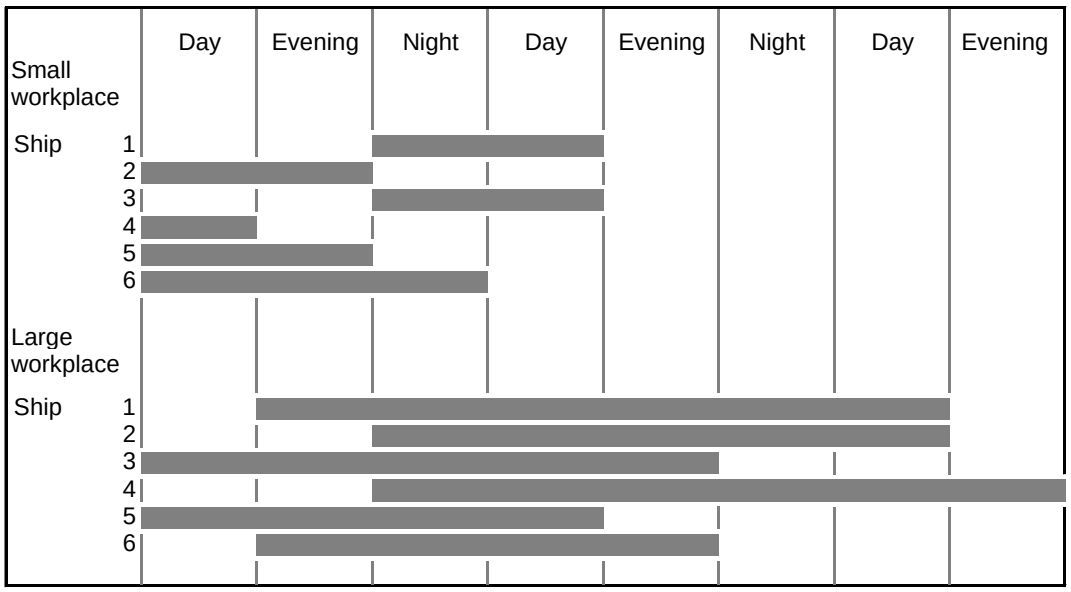
Sources: Enterprise agreements; workplace information requests

The shift mix appears to be related to the scale of container throughput. Average exchanges (that is, the average number of containers loaded and unloaded per ship) at the ports of Sydney and Melbourne are approximately double the average exchange at smaller ports (BTCE 1997a). As a result, ships calling at the larger workplaces examined generally require several consecutive shifts to be worked to complete a ship. At the smaller workplaces examined, the average exchange can usually be handled over two shifts (see figure 4.2 for an example). Moreover, the probability that workplaces in the larger ports will have ships to work is approximately double that of workplaces in smaller ports (BTCE 1997a). Thus, larger workplaces — with a steadier stream of ships and work — are able to use a higher proportion of regular shifts than at smaller workplaces, with less possibility of paid non-working time occurring.

Importantly, the shift mix affects stevedores' ability to allocate labour across the day. Irregular shifts range from around 40 per cent to 65 per cent of 'rostered

on' shifts across the Australian workplaces examined. In contrast, all rostered on shifts are irregular at Fergusson Terminal. Thus, it has substantial additional allocative flexibility compared with that of the Australian workplaces.

Figure 4.2: Example – shifts worked per ship, by workplace size, 1997[a]



a Shaded areas indicate when shifts were worked for each ship.

Source: Workplace information requests

The latest round of enterprise agreements has increased the proportion of irregular shifts — and allocative flexibility — at some of the Australian workplaces examined. For example, the number of irregular shifts at Sea-Land Adelaide has been increased by about 50 per cent over the roster cycle (compared with the roster in its previous enterprise agreement). Irregular shifts can be used in conjunction with guaranteed wage employees and supplementary employees to reduce the incidence of overtime shifts. At one Australian workplace examined, using more supplementary employees and irregularly rostered employees on the day shift instead of the evening shift reduced the number of day shift employees working a double header into the evening shift. This arrangement would result in labour cost savings.

Although irregular shifts allow stevedores greater flexibility in allocating labour over different parts of the day, these shifts can be disruptive for the lives of employees and their families and friends. Given similar conditions, employees generally prefer regular shifts which provide more scope for planning non-work time.

Shift length

Rosters for operational employees in the Australian workplaces examined have similar shift times and lengths. These are specified in enterprise agreements. The workplaces operate three shifts a day. The shift length at most workplaces is seven-and-a-half hours. For example, on weekdays at Sea-Land Adelaide, the day shift runs from 7.30 am to 3 pm, the evening shift runs from 3 pm to 10.30 pm, and the night shift runs from 10.30 pm to 6 am; the shift length on weekends is seven hours. Patrick Brisbane operates eight-hour shifts on weekdays and seven-hour shifts on weekends. Fergusson Terminal in New Zealand operates eight-hour shifts.

There is flexibility at Australian workplaces to extend shifts when required. The enterprise agreement at Patrick Melbourne, for example, states that management can extend day shifts by up to two-and-a-half hours and evening and night shifts by one-and-a-half hours for any reason. Employees working shift extensions are paid at overtime rates (chapter 7). Similar arrangements apply at the other Australian workplaces examined. None of the workplaces use shorter length shifts (for example, four-hour shifts).

Alternative shift lengths are used by stevedores in overseas ports. The Port of Wellington in New Zealand, for example, operates 'just-in-time' labour requisitioning. Under this system, operational employees are notified by 3 pm of the day before the job and may be hired for eight-, ten- or 12-hour shifts. By using variable shift lengths, this system is likely to reduce the extent of paid non-working time.

Management at one Australian workplace had considered moving to 12-hour shifts. The Stevedoring Industry Award allows for 12-hour shifts, as stated in clause 21g, 'where work requirements fluctuate such as in small ports, it may be appropriate to work twelve-hour shifts'. However, none of the Australian workplaces examined have adopted this shift length.

For stevedores, there may be some benefits from 12-hour shifts. Fewer shifts per day would reduce the number of shift changeovers and, as a result, less working time would be lost. The ability to use 12-hour shifts when required could also reduce the extent of paid non-working time (that is, balance of a shift not worked) compared to using shift extensions or double headers under an eight-hour shift system.

A disadvantage of the 12-hour shift is that productivity may decline over the length of the shift as employees are affected by fatigue. However, when employees work double headers they are at the terminal for 15–16 hours.

Twelve-hour shifts are used in a number of other industries (for example, coal mining, emergency services and health services). Whether such shifts deliver net performance gains would require detailed analysis by individual stevedoring workplaces. More generally, there may be benefits for stevedores from having flexibility to select shift lengths to more closely match estimated job duration.

4.4 Shiftwork and occupational health and safety

As noted earlier, stevedoring is an 'around the clock' industry. Stevedoring workplaces use shiftwork to cope with the variability in the timing of ship arrivals and workload. However, shiftwork is not unique to stevedoring. As noted above, shiftwork arrangements are used also in other industries.

Some possible risks of shiftwork to the health and safety of employees could be mitigated by alternative work arrangements. Permanent employees, for example, have the option of working overtime at most workplaces before supplementary employees are engaged. Overtime rates of pay create incentives to volunteer for double header shifts, despite health and safety risks. Employers' flexibility in this respect is constrained by the order of engagement. Greater numbers of permanent employees could also reduce risks to health and safety. However, there are currently a number of disincentives for stevedores to take on more permanent employees, such as high redundancy costs (chapter 6).

4.5 Summary of findings

Several work arrangements, as currently designed, constrain how management allocates employees to shifts on a daily basis. These include the order of engagement, equalisation schemes, notification requirements and rostered time off.

The order of engagement affects workplace performance by restricting the flexibility with which labour can be used. In particular, the use (in terms of shifts worked per week) of supplementary labour is limited by its low ranking in the order of engagement. As a result, management is constrained from engaging daily labour in the most cost-effective mix or the most appropriate skill mix to meet organisational requirements.

The order of engagement, combined with high shift premiums and penalty rates, substantially increases the cost of labour. This occurs because the order of engagement accords preference to overtime by permanent employees rather than the use of supplementary employees (who would not be paid the overtime rate).

The high shift premiums and penalty rates create an incentive for permanent employees to seek overtime shifts, which can result in reduced productivity and timeliness. Double headers involve higher levels of worker fatigue which can affect not only productivity but also employee health and safety.

Labour costs for a given level of activity are also increased through the combination of the order of engagement and the extent of rostered time off and leave entitlements. These arrangements reduce the availability of permanent labour, thus inflating the number of permanent employees required to meet operational requirements.

Working overtime on a regular basis can have deleterious effects on the health and safety, as well as the social and family lives of employees. Employees who consistently work overtime shifts spend more time 'on the job' and therefore have less time to devote to other activities during working weeks. The rotational roster system means that, during certain weeks of the roster cycle, employees' leisure time may not coincide with that of family members and friends.

Equalisation schemes, while supporting employees' notions of fairness, can have a negative impact on productivity and timeliness where they restrict management's ability to allocate the appropriate labour to particular shifts and tasks. The schemes may also diminish incentives for permanent operational employees to improve their work performance. Equalisation schemes are much less of a constraint than in the past because of longer assessment periods; some variation in points is permitted during assessment periods; and there is a capacity to override equalisation in specific situations.

Under weekend notification, stevedores bear a significant risk of having to pay for non-working time. These costs would be reduced if daily notification arrangements were applied to weekend and Monday shifts and/or if more supplementary employees were used.

Irregular shifts allow stevedores greater flexibility in allocating labour over different parts of the day. At the same time, irregular shifts can be disruptive for the lives of employees and their families and friends. Larger workplaces — with a steadier stream of ships and work — are able to use a higher proportion of regular shifts than at smaller workplaces, with less possibility of paid non-working time occurring.

The risks of shiftwork to the health and safety of employees could be mitigated by alternative rostering and leave arrangements. However, employers' flexibility in this respect is constrained by the order of engagement. Overtime rates of pay create an incentive for permanent employees to volunteer for double headers.

5 MANNING

There were marked reductions in gang sizes, manning scales and manning levels in the Australian container stevedoring industry during the Waterfront Industry Reform Authority (WIRA) process. All the workplaces examined use continuous work shifts to achieve higher elapsed rates and lower ship turnaround times. Down drivers are being used more effectively than they were before the WIRA process, contributing to a reduction in paid non-working time. Gang sizes and manning scales for quay cranes and lashing are similar across most of the workplaces examined, including Fergusson Terminal in New Zealand. Constraints currently contributing to higher manning levels of permanent employees include the prescribed size and composition of workforces, the order of engagement, the extent of leave and rostered time off, the costs and difficulty of implementing redundancies, and restrictions on contracting out.

Manning[1] arrangements in selected Australian container stevedoring workplaces are examined in this chapter. At the outset, it is important to distinguish between manning *scales* and manning *levels*.

- Manning scales specify the *number of workers per gang required to perform defined tasks* such as operating heavy equipment (for example, two drivers for one quay crane) or performing other duties such as lashing.
- Manning levels refer to the *total number of workers employed at a workplace*. They include permanent employees, guaranteed wage employees and supplementary employees.

There is obviously a direct relationship between manning levels, gang size and manning scales: an increase in manning scales translates into larger gangs and higher manning levels (holding all other arrangements constant).

[1] Manning is the commonly used term in container stevedoring and refers to manning scales and/or manning levels.

Apart from manning scales (which, in principle, should be a function of technology and health and safety considerations), the key determinants of manning levels at any given container terminal include:

- user demand for stevedoring services (that is, container throughput);
- rostering and leave arrangements (such as rostered time off); and
- the mix and use of permanent employees, guaranteed wage employees and supplementary employees (which are largely based on the labour costs and flexibility associated with each form of employment).

Changes in the demand and/or supply factors noted above create the impetus for stevedoring workplaces to adjust manning levels. Inability or failure to adjust manning levels when there are significant changes in these factors and work arrangements will generally hinder workplace performance.

The appropriateness of current manning scales at container terminals in Australia is a matter of contention. Several participants in this study claimed that gang sizes are larger than necessary. In particular, some participants commented that manning scales on heavy equipment could be further reduced. However, management at some of the Australian workplaces examined considered that manning scales had been reduced to minimum requirements in the operational area.

Manning scales and gang sizes in selected Australian container terminals are discussed in section 5.1. The main factors and work arrangements affecting manning levels are discussed in section 5.2.

5.1 Gang sizes

The gang is the basic work unit at container terminals. There are generally separate gangs for ship working, and for receival and delivery operations. In ship working operations, each gang is assigned to a quay crane.

Work arrangements which affect gang size in ship working operations include:

- whether there are continuous work shifts;
- manning scales for heavy equipment; and
- manning scales for other duties such as lashing.

Recent enterprise agreements at the Australian workplaces examined provide scope for improved flexibility in manning scales. The enterprise agreements of the Patrick workplaces state that ‘fixed manning scales shall not apply’. The Patrick Brisbane enterprise agreement, for example, states that:

> Job mannings and work practices shall be relevant to the Company operations in Fisherman Islands and aimed at progressing to comparable international best practice. Fixed manning scales shall not apply. The parties have discussed, agreed and recorded in an exchange of correspondence, indicative mannings for various examples of stevedoring operations which will apply from the commencement of the agreement. It is agreed that those mannings may be varied from time to time to reflect changes consistent with safe work practices, improved technology and new types of machinery or systems *and to the levels of productivity required by the Company and to the intent of the parties in Clause 6 of this Agreement* [emphasis in original document]. (Patrick Brisbane Enterprise Agreement 1996, clause 23)

In schedule 8 of the Patrick Brisbane agreement, indicative manning scales are based on a 'normal' working situation. The agreement specifically states that management can adjust manning scales upwards and downwards to meet operational requirements. Indicative manning scales are provided for both continuous and noncontinuous work shifts.

There are similar clauses formally allowing variation in manning scales in the enterprise agreements of the other Australian workplaces examined (appendix J). Such clauses signal the agreement of the parties to improve labour flexibility compared with previous manning systems. However, the ease with which management is able to adjust manning scales in practice to suit different operational requirements is unclear.

Continuous work shifts

An important development in the past ten years has been the adoption of continuous work shifts, which allow machinery to operate through rest breaks.[2] This shift arrangement affects gang sizes and productivity in both ship working and receival and delivery operations. All the workplaces examined, including Fergusson Terminal in New Zealand, now operate continuous work shifts, although noncontinuous work shifts are still used in some circumstances.

The main advantage of continuous work shifts is that ship and truck turnaround times are reduced (improved timeliness). However, gang sizes are larger under this shift arrangement. At one of the Australian workplaces examined, gangs on this type of shift usually have an extra foreman and two extra general hands — that is, an average gang size of 13 employees compared with 10 employees for noncontinuous work shifts. Management at another Australian workplace also noted that there is greater difficulty, under continuous work shifts, in efficiently

[2] Continuous work shifts are also known as work-through shifts.

orchestrating driver changeovers and assigning other duties to drivers for short down periods. Continuous work shifts are described in greater detail in box 5.1.

For both continuous and noncontinuous work shifts, drivers of heavy equipment are now expected to perform other duties during their down periods at all the Australian workplaces examined. This is a significant improvement on the arrangements existing before the WIRA process. Management at most of the Australian workplaces examined confirmed that down drivers are being used more effectively than in the past. This has reduced the extent of paid non-working time compared with that prior to WIRA.

The enterprise agreements of Patrick Melbourne and Patrick Brisbane list various activities that down drivers can perform. Straddle carrier down drivers may perform a range of functions including lashing duties, plugging and unplugging reefers, cleaning and washing duties, delivering vehicles to and from the refuelling bay, and driving light equipment. Quay crane down drivers do not normally perform lashing duties unless the exchange has been completed. During down periods, quay crane drivers generally remain at the point of stow and guide the crane.

At any given container terminal, gang sizes can vary from 'ship to ship' depending on a number of factors including: the type of shift arrangement (continuous or noncontinuous); the number and type of equipment deployed; and the difficulty and extent of the lashing task.

That said, *typical* gang sizes on continuous work shifts are broadly similar across most of the workplaces examined, including Fergusson Terminal in New Zealand (table 5.1). The number of drivers of heavy equipment (excluding internal transfer vehicles) in a gang ranges from five to seven across the workplaces, depending on equipment configuration. Patrick Brisbane usually operates with two straddle carriers per gang. Unlike the other workplaces examined, CTAL Sydney operates a different equipment configuration, using rubber-tyred gantries and internal transfer vehicles instead of straddle carriers to move containers around the yard.

Based on the typical gang compositions, Fergusson Terminal has fewer drivers per gang than at Sea-Land Adelaide, P&O Ports Melbourne and Patrick Melbourne which all have the same equipment configuration per gang (that is, one quay crane and three straddle carriers). This reflects a lower manning scale for straddle carriers at Fergusson Terminal. Down drivers at Fergusson Terminal do not perform other duties during the shift. However, there is an additional operational employee performing other duties for the entire shift.

Box 5.1: Continuous and noncontinuous work shifts

The Australian workplaces examined use continuous work shifts which allow for machinery to operate through rest breaks (that is, smoko and crib). On noncontinuous work shifts, gang members stop for breaks at the same time. Management indicated that a mix of continuous and noncontinuous work shifts were worked depending on the availability of labour and the necessity to turn ships around quickly.

The number and length of breaks vary according to the length of shift worked. The *Stevedoring Industry Award 1991* prescribes paid rest periods totalling 45 minutes for seven-hour shifts and 60 minutes for eight-hour shifts (clauses 25a and 25b). The most common shift arrangement worked at the Australian workplaces examined is a shift of seven-and-a-half hours with two rest periods. The first break is for 20 minutes and the second is for 25 minutes.

Work may be organised to allow for the continuous working of equipment for the length of a shift by staggering rest breaks (Stevedoring Industry Award, clause 25e). Continuous work shifts normally require 'hot seat' changeovers — that is, a driver continues working until the relief driver arrives. Drivers perform other duties during their down periods. The figure below illustrates how work is typically organised to operate one quay crane and three straddle carriers servicing the quay crane.

Continuous driving arrangements

Employee	1st period	Smoko (20 minutes)			2nd period	Crib (25 minutes)			3rd period
		E	N	L		E	N	L	
1	Crane		x	WWR	GD	x			Crane
2	GD	x			Crane		x	WWR	GD
3	WWR			x	WWR			x	WWR
4	Str.1		x		Str.3			x	GD
5	Str.2		x		GD	x			Str.1
6	Str.3			x	GD	x			Str.2
7	GD	x			Str.1		x		Str.3
8	GD	x			Str.2		x		GD

Notes: Work breaks: E = early; N = normal; L = late. WWR = work where required; Str. = straddle carrier; GD = general duties; x = when the employee takes a break.

By working equipment continuously, stevedores are able to increase the use of equipment during each shift. This leads to an increase in the number of containers moved over each shift and reduces the time that a ship is worked at a terminal — that is, higher elapsed rates (see glossary) and reduced ship turnaround times (improved timeliness). Against these benefits are the costs of additional labour required for continuous working.

Sources: Stevedoring Industry Award*;* enterprise agreements; detailed discussions

Table 5.1: Typical gang sizes per quay crane for continuous work shifts, by workplace examined, 1997[a]

	Sea-Land Adelaide[b]	*CTAL Sydney*[c]	*P&O Ports Melbourne*	*Patrick Melbourne*	*Patrick Brisbane*	*Fergusson Auckland*
	no.	no.	no.	no.	no.	no.
Crane drivers	2	2	2	2	2	2
Straddle or RTG drivers[c]	5	3	5	4–5	3	4
General hands[d]	4	4	2	1	3	4
Foremen	1	2	3	2	2	2
Clerks	1	1	1	1–2	1–2	1
Total	**13**	**12**	**13**	**10–12**	**11–12**	**13**

a Stevedores indicated that gangs may be supplemented with additional employees to perform lashing duties when the lashing job is large and/or difficult.

b Crane down driver works as a deck foreman.

c CTAL Sydney typically operates with two rubber-tyred gantries (RTGs) per quay crane and Patrick Brisbane usually operates with two straddle carriers per quay crane. The other workplaces typically operate three straddle carriers per quay crane.

d For CTAL Sydney, drivers of internal transfer vehicles are included in this category.

Source: Workplace information requests

There have been reductions in gang sizes for continuous work shifts at most of the Australian workplaces examined over the past ten years. Management at one Australian workplace commented that gang sizes had been reduced substantially. Smaller gang sizes primarily reflect reduced manning scales for heavy equipment and other duties. The bulk of these reductions occurred as part of the WIRA process (chapter 2).

The fact that gang sizes are similar across most of the Australian workplaces examined could indicate, given current technology, that this is the most efficient size. Alternatively, this result may reflect the presence of the same employee bargaining agent at all the workplaces. Evidence that gang sizes at Fergusson Terminal in New Zealand (which has recently undergone considerable reforms) are equivalent to those at the Australian workplaces examined, supports the first interpretation.

Manning scales for heavy equipment

Manning scales for heavy equipment indicate the number of drivers per gang assigned to operate quay cranes, straddle carriers, rubber-tyred gantries and internal transfer vehicles (see appendix C for a description of driving tasks).

Overall, changes in driving arrangements have significantly contributed to smaller gang sizes. Manning scales for quay cranes — two men for one crane — remained unchanged during the WIRA process. However, manning scales applying to straddle carriers, rubber-tyred gantries and internal transfer vehicles were reduced from two operators for one machine to three operators for two machines and five operators for three machines. This scale has been adopted by all the Australian workplaces examined and represents a significant increase in the ratio of machines to operators (table 5.2).

Table 5.2: Manning scales for heavy equipment at workplaces examined, 1997

Number of machines	*Number of operators*	*Ratio*[a]	*Workplaces where applied*	*Type of heavy equipment*
1	1	1.00	None	–
1	2	0.50	Australian and New Zealand[b]	Quay cranes
2	3	0.67	Australian	Straddle carriers, rubber-tyred gantries and internal transfer vehicles
3	4	0.75	New Zealand[b]	Straddle carriers
3	5	0.60	Australian	Straddle carriers, rubber-tyred gantries and internal transfer vehicles

a Ratio of machines to operators.

b Fergusson Terminal.

Sources: Enterprise agreements; workplace information requests

Current manning scales for quay cranes in Australia are equivalent to those at Fergusson Terminal and several other overseas ports. Manning scales are one man for one crane at some other international ports (table 5.3). In the case of Singapore, where cranes are manned at one driver per crane, drivers have poorer work conditions than do their Australian counterparts — in particular, they have fewer and shorter rest breaks. The Metal Trades Industry Association response to the Research Issues Brief noted that at the port of Singapore:

> ... crane drivers spent their whole eight hour shift alone in the crane, with not even toilet breaks. They enjoy a fifteen minute break for lunch, which is sent up to them in a bucket. (response 9, annexure E, p. 15)

Manning scales for other heavy equipment at Australian terminals are somewhat greater than those at Fergusson Terminal. Straddle carriers are manned at the rate of four operators for three machines at Fergusson Terminal, compared with

five for three manning at the Australian workplaces examined (table 5.2).[3] Manning scales are not formally specified at Fergusson Terminal.

Table 5.3: Manning scales for quay cranes at selected Australian and overseas ports, 1997

Port	*Country*	*Manning scale*[a]
Adelaide[b]	Australia	two for one
Auckland[c]	New Zealand	two for one
Klang	Malaysia	one for one
Los Angeles	United States	two for one
Nagoya	Japan	two for one
Philadelphia	United States	two for one
Singapore	Singapore	one for one
Tilbury	United Kingdom	one for one

a The manning scale for each port (except for Adelaide and Auckland) was derived from the number of crane drivers per gang and is based on the assumption of one crane per gang.

b Down driver works as a deck foreman.

c Fergusson Terminal.

Sources: TCS (1997b); workplace information requests

There is apparently rarely any deviation from the manning scales on heavy equipment specified in enterprise agreements. In detailed discussions, management at the Australian workplaces examined indicated that this is because the manning scales for heavy equipment are appropriate for most operational circumstances.

One manager commented that the three for two manning system for heavy equipment works most effectively during the day shift, when down drivers are fully utilised, but during some evening and night shifts there may not be sufficient work for down drivers to perform. Another manager noted that often fewer employees are required during shift extensions, but typically the same gang size is maintained during the extension (chapter 8).

3 As noted earlier, typical gang sizes are similar at Fergusson Terminal and the Australian workplaces examined because an additional employee is allocated to the gang at Fergusson Terminal to perform other duties.

Manning scales for lashing duties

The typical manning scale for lashing duties at the Australian workplaces examined is three or four employees (see appendix C for a description of the lashing task). Enterprise agreements of the Patrick workplaces, for example, specify that lashing duties will be performed by a minimum of three employees under the general supervision of the foreman of the ship being lashed. At Patrick Brisbane, a lashing team may comprise three employees including a foreman.

There is formal flexibility to adjust the number of employees assigned to lashing duties. For example, the Sea-Land Enterprise Agreement 1997 states that 'the number of employees required for lashing/unlashing shall be in accordance with real operational requirements' (clause 9z). And, the enterprise agreement for Patrick Brisbane specifies that:

> All other employees including the WWR [work where required], down drivers, clerical and G5/G6 foremen will perform lashing duties as required. The Company may supplement this activity with additional personnel as necessary. (Patrick Brisbane Enterprise Agreement 1996, schedule 8a)

The Maritime Union of Australia (MUA) noted that if a stevedore requires more people to perform lashing duties to finish an exchange, this is achievable under the terms of the enterprise agreement. Similarly, management at a large Australian terminal commented that if lashing on certain ships is difficult (as a result of ship configuration and lashing gear)[4], extra employees will perform lashing duties. Some workplaces will assign yard employees to assist with lashing.

However, several participants contended that sometimes an insufficient number of employees were allocated to lashing duties. In detailed discussions, it was claimed that more men, while needed for lashing duties on large exchanges to increase crane productivity, were not always made available by management.

One reason for this apparent undermanning may be that management must take into account labour costs as well as crane productivity when deciding the number of employees performing lashing duties. Higher manning scales for lashing duties may increase crane productivity, but they also add to labour costs.

The difficulty of the lashing task is often not known until the ship arrives at the terminal, so management at the Australian workplaces examined generally pre-allocates three or four employees to perform lashing duties. This is similar to lashing arrangements at Fergusson Terminal. If the lashing task is deemed

[4] More labour is generally required for ships with automatic twistlocks, for example.

substantial and/or difficult once the ship arrives, management indicated that they re-assign employees working elsewhere at the terminal to lashing duties.

The 'nick'

Large gang sizes in ship working operations often used to lead to some workers leaving work early without permission, while still being paid for the full shift. This is one form of what is known as the 'nick' (box 5.2). It generally occurred because there was insufficient work to fully occupy all gang members. The likelihood of employees leaving work early without permission has generally been higher on night and evening shifts, because there are fewer alternative duties to perform and less supervision.

It is difficult to gather direct evidence on the current extent and frequency of this practice. Management at most of the Australian workplaces examined noted that several factors (such as reduced manning scales and greater supervision) have combined to reduce its incidence. However, recent suspensions and dismissals make it clear that it has not been completely eliminated. In late 1997, for example, Patrick dismissed two employees[5] in Fremantle for allegedly 'nicking off' and CTAL Sydney placed three employees on notice after they were allegedly caught off the terminal (Farynski 1997a, p. 1).

The instant dismissal of a Patrick employee at Darling Harbour for allegedly nicking off was considered by the Australian Industrial Relations Commission (AIRC). The AIRC viewed Patrick's policy on the nick as unduly harsh for a first offence and recommended that the employee be re-instated. It also recommended that Patrick amend its policy and that 'in the case of repeated breach, termination should be determined having regard to the circumstances of each case' (box 5.3).

In a recent media release, the MUA stated that it 'does not condone its members 'nicking' off the job before the end of shift' and that 'the nick is not union policy' (MUA 1997c).

Nonetheless, to the extent that this practice has continued, it may indicate scope for lower manning scales on certain shifts.

[5] These employees were later re-instated by the Australian Industrial Relations Commission.

Box 5.2: The 'nick'

The nick is the term used to describe the situation whereby employees leave a shift early while still being paid for the full shift. There are several forms of the nick. Employees may leave their duties and the terminal:

- without permission;
- under the 'job and finish'; or
- under the 'quota'.

Under the job and finish arrangement, employees in the gang may decide to increase their work rate and finish the job (that is, the exchange) part way through the shift. Under the quota arrangement, the supervisor sets a target level of output (that is, the number of containers to be moved). Once this target has been met, the employees are allowed to leave the terminal. In both cases, there is a tacit agreement between the supervisor and the gang members.

The first form of the nick listed above may cause a loss in productivity in terms of the time that employees are not at the workplace to perform their duties. The job and finish and the 'quota' arrangements may be viewed as incentive tools which raise work rates and crane productivity over the hours actually worked. However, if there are more containers to be moved, other ships to be worked, or other duties that could be performed during the balance of the shift, productivity is ultimately lost under these informal practices. In both cases, the nick results in paid non-working time.

It is difficult to gather direct evidence on the incidence over time of employees leaving work early without permission. According to most of the Australian workplaces examined, its incidence has been reduced. Factors that appear to have contributed to the decline include:

- penalties for leaving the workplace without permission (such as the 'docking of pay' and dismissal);
- greater allocation of other duties for workers when there is a lack of activity in the working of ships; and
- a reduction in manning scales.

Despite the apparent fall in the incidence of the nick, detailed discussions with some participants suggests that the practice has not been eliminated.

5.2 Manning levels

Manning levels in stevedoring declined markedly as a result of the WIRA process (appendix F). The estimated number of stevedoring employees for 1997 (chapter 2) indicates that manning levels have risen since WIRA, but are

significantly below pre-WIRA levels. This increase may reflect a number of factors, including growth in international trade as well as the operation of work arrangements.

Box 5.3: A recent alleged case of the 'nick'

In September 1997, Patrick dismissed an employee at Darling Harbour who had allegedly 'nicked off' (that is, leaving work early without permission). In the preceding month, Patrick had issued a notice to all employees stating that 'the company would not tolerate the 'nick' any further' and that 'any person found to have nicked will not be warned but be instantly dismissed'.

The dismissed employee alleged that the termination was unjust. The matter went before the Australian Industrial Relations Commission (AIRC) for resolution. Patrick argued that the employee had nicked off whereas the employee contended that he had left the workplace without permission owing to 'pressing domestic circumstances'.

The AIRC ruled that the 'implementation of a policy of instant dismissal in these circumstances is harsh, particularly where mitigating circumstances exist such as those in this case. The fact that employees were advised of this new policy does not render it less harsh or unjust'.

The AIRC recommended the reinstatement of the dismissed employee. It also directed Patrick to amend its policy regarding the nick to provide for the suspension of an employee without pay for the first offence and for an employee to be warned in writing that any further occurrence is likely to lead to termination.

Source: AIRC (1997b)

Stevedores face a number of constraints in determining the level and mix of labour to meet variable demand. A number of work arrangements (as currently designed) are likely to contribute to high manning levels in terms of permanent employees at the Australian workplaces examined. These include:

- prescribed size and composition of labour;
- the order of engagement;
- the extent of leave and rostered time off;
- the costs and difficulty of implementing redundancies; and
- restrictions on contracting out.

These constraints result in higher levels of permanent labour and the underuse of supplementary employees. In turn, they can lead to reduced productivity and associated higher labour costs.

The number of permanent employees by grade level and/or function are prescribed in the enterprise agreements of the Australian workplaces examined (see box 5.4 for a typical example). However, the agreements also include provisions to enable adjustment of the size and composition of the workforce during the course of the agreement under certain circumstances. The Patrick Melbourne enterprise agreement, for example, states:

> It is agreed to review the agreement and/or the size and composition of the workforce in the event of any loss of business or facilities or through the introduction of change in accordance with clause 43 of the Award. (1996, clause 8)

Box 5.4: Workforce size and composition, P&O Ports Melbourne

The enterprise agreement of P&O Ports Melbourne prescribes the size and composition of the permanent operational workforce. The following table shows the number of permanent employees by grade and function in the operational area.

	Grade				
	3	4	5	6	Total
Operations					*231*
Foremen			16	18	34
Clerks		32	3	5	40
Operations Head Clerks				5	5
Operations Clerks		30			30
Allocators			3		3
Payroll Clerks		2			2
General	110		32		142
Key Crane Operators			32		32
Straddle Drivers	76				76
General Duties etc	24				24
Support Services etc	10				10
Reefer Attendants			10		10
Watchmen	5				5
Maintenance					*52*
General		12		36	50 [a]
Mechanical Leading Hand etc				22	22
Electrical Leading Hand etc				14	14
Trades Assistants		10			10
Storemen		2			2
Ungraded Apprentices					2
Clerks			2		2
Total Operational					***283***

a Includes 48 graded employees and two ungraded employees.

Source: P&O Ports Melbourne Enterprise Agreement (1996)

This provision potentially lessens the constraint placed on the ability of workplaces to alter manning levels to meet changing operational requirements. Nevertheless, consultation requirements (contained in clause 43 of the award) can restrict or delay managerial responses to change.[6]

As noted in chapter 2, each stevedore maintains a pool of supplementary labour. The number of new supplementary employees to be recruited is prescribed in some enterprise agreements. The pool size ranges from 6 per cent to 18 per cent of the workforces in the Australian workplaces examined (table 5.4). However, as discussed in chapter 4, the order of engagement at most of the Australian workplaces examined gives preference to using permanent employees for overtime rather than using supplementary employees. This restricts the use of supplementary employees in terms of the number of shifts worked per week.

Table 5.4: Operational workforce by employment status, 1997 (per cent)[a]

Workplace	*Permanent employees*[b]	*Supplementary labour pool*[c]	*Guaranteed wage employees*
Sea-Land Adelaide	80	6	14
CTAL Sydney	81	9	10
P&O Ports Melbourne	84	15	1
Patrick Melbourne	89	7	4
Patrick Brisbane[d]	77	18	5

a These percentages can be influenced by the size of the supplementary pool that each workplace chooses to maintain — the size of the pool may not reflect the actual use of supplementary labour.

b Trainees are counted as permanent employees.

c Weekly use of supplementary employees (in terms of the number of shifts worked) may differ between workplaces.

d Operational employees at Patrick Brisbane (Fisherman Islands) also carry out some break bulk operations.

Source: Workplace information requests

Given the limited number of shifts that can be allocated to supplementary employees, management at one Australian workplace noted that it was preferable to distribute these shifts to a smaller pool of supplementary employees so they have an incentive to remain with the enterprise. This also allows the supplementary employees to build up more skills and experience compared with employees in a larger supplementary pool.

6 The Workplace Relations Act enables the AIRC to make orders in cases where the employer fails to consult the union about terminating the employment of 15 or more employees for reasons of an economic, technological, structural or similar nature. (s.170GA).

In New Zealand, there is considerable variation in the mix of permanent and casual employees at different stevedoring workplaces. Casual employees comprise almost 100 per cent of the workforce at International Stevedoring Operations in Tauranga, but only around 10 per cent of the workforce at Fergusson Terminal in Auckland.[7]

As noted in chapter 8, the extent of leave and rostered time off means that permanent employees at the Australian workplaces examined are not available to work a significant number of shifts. This has generally added to manning levels, because additional employees are required to cover the periods when permanent employees are not available. Employee availability is lower at the Australian workplaces examined (52–56 per cent) than at Fergusson Terminal (62 per cent) as a result of these provisions (table 5.5).

Table 5.5: Availability of permanent employees

Workplace	*Employee availability*[a]
	%
Sea-Land Adelaide	55
CTAL Sydney	56
P&O Ports Melbourne	56
Patrick Melbourne	56
Patrick Brisbane	52
Fergusson Terminal Auckland	62

a The number of days per year (calculated as a percentage) that an employee is required to work, taking account of annual leave, sick leave, rostered days off, rostered weeks off and accrued days. The measure does not account for working days lost as a result of industrial action (which would also affect employee availability).

Sources: Enterprise agreements; workplace information requests

Recent changes in market share among stevedoring companies have given rise to surplus labour and the requirement for redundancies at some Australian workplaces. P&O Ports in Brisbane, for example, has lost business to Patrick (MUA 1997d, p. 16). This has resulted in excess labour at the P&O Ports terminal. P&O Ports reached agreement with the various maritime unions for 28 employees to be made redundant during 1997. Similarly, surplus labour has emerged at Patrick Melbourne, reflecting reduced business; the AIRC noted that

7 The workforce estimate for Fergusson Terminal includes a proportion of maintenance employees at the Ports of Auckland but does not include all clerical employees. The estimate is based on the ratio of TEU throughput of Fergusson Terminal to TEU throughput of the Ports of Auckland.

'it was common ground between the parties that more than 100 of the current employees are surplus to requirements' (Farynski 1997b, p. 1).

As discussed in detail in chapter 6, the ability of stevedores to retrench permanent employees is heavily constrained by redundancy costs and the possibility of industrial action. As a result, employees who are surplus to requirements in one area of operations are often retained by the company in another capacity. Computerisation of vehicle booking systems, for example, has reduced the number of clerks required at workplaces. In many cases, these clerks have been retrained to perform other tasks such as operating heavy equipment.

Stevedores are also limited in their use of contracting out. The enterprise agreements of all the Australian workplaces examined do not permit the use of contractors where their use will reduce the number of permanent tradesmen. Several managers noted the potential for further cost savings from contracting out activities such as ancillary and maintenance services (chapter 6). If more extensive use of contracting out were possible, this would be likely to reduce manning levels of permanent employees as well as reducing labour costs.

5.3 Summary of findings

There were marked reductions in gang sizes, manning scales and manning levels in the Australian container stevedoring industry during the WIRA process.

All the Australian workplaces examined have adopted continuous work shifts in ship working and receival and delivery operations, to achieve higher elapsed rates and lower ship and truck turnaround times — that is, improved timeliness. However, against these benefits are the costs of additional labour (that is, larger gang sizes) which is required for continuous working.

Down drivers are being used more effectively than in the past. These employees now perform a wider range of duties, reducing the extent of paid non-working time compared with that existing before the WIRA process.

Typical gang sizes in Australian container terminals are comparable to those at Fergusson Terminal in New Zealand. Manning scales for quay cranes and other heavy equipment are the same across the Australian workplaces examined and broadly similar to those at Fergusson Terminal. Manning scales for lashing are similar across the workplaces examined.

Enterprise agreements at the Australian workplaces examined formally provide for flexibility in manning scales. However, the ease with which management is able to adjust manning scales in practice to suit different operational

requirements is unclear. At any rate, it appears that manning scales, as currently applied, are appropriate for most operational situations.

The constraints that are likely to contribute to high manning levels of permanent employees at the Australian workplaces examined include: the prescribed size and composition of workforces; the order of engagement; the extent of leave and rostered time off; the cost and difficulty of implementing redundancies; and restrictions on contracting out. In particular, the high cost of redundancies has reduced stevedores' ability to adjust manning levels and acted as a disincentive to recruiting permanent labour. It could also undermine permanent employees' incentives to perform. Progress has been made in reducing overmanning in stevedoring over the past decade, but these constraints still contribute to higher overall labour costs and reduced labour productivity.

6 RECRUITMENT, REDUNDANCY AND CONTRACTING

Union membership among operational employees remains comprehensive in the Australian container stevedoring workplaces examined. Since the adoption of enterprise bargaining, union involvement in the recruitment process has diminished.

The high cost of redundancies restricts the ability of stevedores to adjust manning levels of permanent employees. Industrial disputation is a significant further deterrent to initiating redundancies. The cost of redundancy and the possibility of industrial disputation contribute to retention of surplus labour. This lowers productivity and inhibits recruitment. Some ancillary services are contracted out, but the extent of contracting is limited by provisions in enterprise agreements as well as constraints on downsizing the number of permanent employees.

The size of the permanent workforce can be adjusted through the use of recruitment and redundancy measures and contracting. These measures can be used separately or in tandem to change the number of people employed, as well as to change workforce composition in terms of skills, age and attitudes. Arrangements at the Australian container stevedoring workplaces examined relating to recruitment, redundancy and contracting and their impacts are discussed in this chapter.

6.1 Recruitment

Recruitment may occur to meet expanding demand, to fill skill gaps and to replace employee retirements or resignations. As noted in chapter 2, workplaces can recruit several different types of labour, including permanent employees, guaranteed wage employees, trainee stevedoring employees and supplementary employees.

The *Stevedoring Industry Award 1991* gives employment preference to union members or workers who agreed to become members on commencing

employment. Several of the enterprise agreements (for example, Sea-Land Adelaide and P&O Ports Melbourne) state that recruitment preference will apply in accordance with the award. However, as a result of the *Workplace Relations Act 1996*, union preference cannot legally be enforced. Nevertheless, union membership among operational employees at the Australian workplaces examined continues to be comprehensive. There have been aborted attempts to employ non-union labour at ports in Fremantle, Portland and Cairns in recent years. The attempt to use non-union labour on the Cairns waterfront was halted by the possibility of industrial action in overseas ports (box 6.1).

Box 6.1: International union links

From 10 September 1997, International Purveyors undertook to do its own stevedoring at the port of Cairns for the ship *Java Sea*. The company employed two staff, one supervisor and a consultant to do the work previously done by nine members of the Maritime Union of Australia (MUA) who were employed by Northern Shipping Stevedoring.

International Purveyors is a subsidiary of Freeport Indonesia, a US-owned mining company in Irian Jaya. Freeport ships all of its supplies from Australia through Cairns.

The MUA responded by establishing picket lines at Cairns, and contacted the International Transport Federation (ITF), of which the MUA is a member. The ITF pressured the *Java Sea* not to berth in Cairns, or risk ITF bans on the ship owner's larger international operations. International Purveyors subsequently lifted the redundancy orders on the seven full-time employees and negotiated with the MUA about changing its work arrangements.

Sources: Sharp (1997); Ramsey (1997); Norington (1997); Trinca (1997)

During the Waterfront Industry Reform Authority (WIRA) process, recruitment levels were low (appendix F), although recruitment has increased in recent times. Time series data on recruitment at the workplace and industry levels are not readily available. However, around 300 new employees were reported to have been recruited to the stevedoring industry in 1994 (MUA 1994a, p. 5). These included permanent employees, guaranteed wage employees and trainee stevedoring employees. In addition, the permanent workforces at two of the Australian workplaces examined increased between 1994 and 1997 (table 6.1). Sea-Land Adelaide and CTAL Sydney have also recruited new guaranteed wage employees and supplementary employees in recent years.

Table 6.1: Operational employees at selected Australian workplaces[a]

Workplace	*1994*	*1997*
	no.	no.
Sea-Land Adelaide	68	93
CTAL Sydney	273	323

a Permanent employees.

Sources: Workplace information requests; enterprise agreements

Apart from enforcing the union preference clause, maritime unions had substantial input into the recruitment of labour before the WIRA process (appendix F). Since the adoption of enterprise bargaining in the early 1990s, union involvement in recruitment has greatly diminished. The MUA noted in the detailed discussions that, as a result of the WIRA process, it no longer has any involvement in recruitment. Management at several of the Australian workplaces examined also noted that the recruitment process is generally free from union involvement, although the MUA can and does make representations to management.

The Australian workplaces examined have implemented competitive, merit based recruitment and promotion systems. The enterprise agreement at P&O Ports Melbourne, for example, states that:

> Employees shall have the opportunity to compete for employment and career advancement on the basis of their skills, ability and knowledge, i.e., the merit principle. (P&O Ports Melbourne Enterprise Agreement 1996, clause 1.8)

Recently, candidates for operational positions at Patrick workplaces were screened by a contracted employment agency and subjected to aptitude, medical and fitness tests. The Australian workplaces examined use internal and/or external advertising of vacant positions followed by shortlisting, interviews, selection and appointment. New operational employees are sourced from the general labour market and need not possess previous experience in the stevedoring industry. Guaranteed wage employees and supplementary employees are often successful applicants for full-time permanent positions because they have skills and experience immediately applicable to the industry.

Management recruitment is conducted in a similar manner to executive selection in other industries, being sourced from competitor stevedores, other industries or supervisory employees. Supervisors are generally sourced from seagoing personnel, transfers from other terminals, internal operational employees (primarily foremen) or direct recruitment.

6.2 Redundancy

Manning levels may need to be adjusted by stevedores from time to time for a variety of reasons — for example, varying demand as a result of contracts changing hands, changing technology or company amalgamations. This section considers the ability of stevedores to reduce the manning levels of permanent employees through redundancy.

Provisions relating to the redundancy process for all stevedores are specified in retirement and redundancy agreements. These agreements set out the procedures and the scale of entitlements for redundancies. They were negotiated on a company by company basis with the unions in 1992 following the final report of WIRA. The agreements replaced the special early retirement and redundancy package which applied over the three years to 31 October 1992.

Retirement and redundancy agreements are contained within the Patrick and Sea-Land enterprise agreements. The Conaust/CTAL Retirement and Redundancy Agreement 1992 is a separate document which applies to both P&O Ports Melbourne and CTAL Sydney.

The agreements specify that volunteers must be called for a redundancy declaration if redundancies are being offered. The stevedore can declare the skill mix required for redundancies — for example, five crane drivers, three clerks and so on — however, individuals cannot be nominated. Redundancies are voluntary, so it would be coincidental if the stevedore's skill requirements matched those of the workforce following the processing of employee redundancy applications. Under the agreement, the stevedore has the right to turn down redundancy applications on the grounds of maintaining the necessary levels of skills within the workplace. However, any change to the skill mix of nominated redundancies must be by consent between management and employees (represented by the relevant union) and is likely to involve the AIRC. The outcome may be voluntary redundancies (with entitlements specified in table 6.2) or retrenchments, with the same entitlements as redundancies.

The agreements are prescriptive (box 6.2), time consuming and difficult for stevedores to implement, unless they are willing to accept skill imbalances, which must impact adversely on workplace performance.

Under WIRA, 4479 stevedoring employees accepted the retirement and redundancy package offered. There have been few redundancies since the introduction of the retirement and redundancy agreements. P&O Ports recently

Box 6.2: Retirement and redundancy agreements

The retirement and redundancy agreements are prescriptive in nature and several pages in length. The following is an excerpt from the agreement applying at P&O Ports Melbourne and CTAL Sydney, but is typical of agreements at the Australian workplaces examined.

> REDUNDANCY SITUATIONS
>
> Upon the declaration of a redundancy situation by the company, volunteers for retirement/redundancy shall be sought from employees in the redundant positions in the following order and scale of entitlements:
>
> a) for employees aged 58 years or more with 15 years or more service, the entitlement shall be 57% of the remaining weeks to age 65 years with a maximum entitlement of 148 weeks payment at the award rate of pay;
>
> b) for employees aged 45 years or more with 8 years or more service the entitlement shall be 50% of the remaining weeks to age 65 with a maximum entitlement of 130 weeks payment at the award rate of pay;
>
> c) for employees aged 35 years or more with 4 years or more service the entitlement shall be 45% of the remaining weeks to age 65 with a maximum entitlement of 104 weeks payment at the award rate of pay; and
>
> d) for employees aged under 35 years or for other employees with less than 4 years service the entitlement shall be 40% of the remaining weeks to age 65 with a maximum entitlement of 78 weeks payment at the award rate of pay.
>
> The application of the above procedures and acceptance of volunteers by the company shall be conditional upon maintaining the necessary level of skills required within the company.
>
> In the event that sufficient volunteers are not forthcoming as a result of the application of the above procedures, the companies, the unions and employees shall confer prior to the companies exercising any intended necessary retrenchments.

This is only part of the retirement and redundancy agreement. There are also sections on early retirement, and vacancies and redeployment.

Source: Conaust/CTAL Retirement and Redundancy Agreement (1992)

made 28 employees in Brisbane redundant. Australian Stevedores[1] encountered significant difficulties in implementing redundancies (either voluntary or involuntary) under the retirement and redundancy agreement. This is highlighted by the 'case of 55' (box 6.3). This and other cases involving the potential redundancy of permanent labour indicate a strong likelihood of industrial disputation over this issue. Industrial disputation is a significant potential cost of initiating redundancies.

More recently, Patrick Melbourne declared 100 employees surplus to requirements as a result of a downturn in demand (Farynski 1997b, p. 1). Patrick

[1] Australian Stevedores was renamed Patrick The Australian Stevedore in early 1995.

Box 6.3: Stevedoring redundancies — the case of 55

Australian Stevedores attempted to make 55 employees redundant in 1994 following the merger of several stevedoring companies. This led to substantial industrial disputation (table 2.6). Mr Peter Evans (who was the chairman of the Waterfront Industry Reform Authority, 1989-92) reported on the dispute to the then Minister for Transport and Industrial Relations. Mr Evans found that consultation between the employer, union and employees prior to commencing retrenchments — as required by the retirement and redundancy agreement — did not occur.

The matter went before the AIRC for resolution. The AIRC directed the company to re-instate the employees and directed the union to lift all bans and limitations on work and take no further industrial action while the matter was being resolved (AIRC 1994a).

In a subsequent decision, the AIRC stated that it appeared 'all parties now acknowledge that the figure of 55 is correct as being surplus to the company's requirements in Sydney'. The AIRC then set out the procedure to be followed for redundancies in this case (AIRC 1994b). Under the amended procedure, 36 employees ultimately took redundancies and six employees were transferred to another workplace.

Sources: AIRC (1994a, 1994b); Evans (1994); workplace information request

will also have surplus labour at its Sydney terminal, resulting from a change to less labour-intensive technology. But Patrick, and any other stevedore wanting to implement a large number of redundancies, must consider the other costs, apart from the possibility of industrial disputation.

Redundancy entitlements specified in the retirement and redundancy agreements are related to age and/or years of service (table 6.2). The scale of entitlements is identical across the workplaces examined. There is a payment rate for each age/years service category, which is applied to the number of weeks between the employee's current age and age 65 years. The weeks calculated under this formula cannot exceed the specified maximum. Each week is paid at the award rate. However, for each category, the maximum entitlement would apply in all cases except where employees are aged in their early 60s.

The retirement and redundancy agreements apply to both MUA members (operational employees, grades 1–6) and Australian Maritime Officers Union (AMOU) members (supervisors). Patrick estimated that across all its Australian workplaces, the average redundancy payment would be $73 000 for MUA members and $190 000 for AMOU members.[2] The maximum payouts were

[2] Estimates at June 1997.

estimated at $110 000 and $230 000 for MUA and AMOU members respectively.

Table 6.2: Redundancy payments in the stevedoring industry

Age and years' service	*Payment rate*[a]	*Maximum payment*
	%	weeks
Aged less than 35 years, or less than four years' service	40	78
Aged 35 years or more with four or more years' service	45	104
Aged 45 years or more with eight or more years' service	50	130
Aged 58 years or more with 15 or more years' service	57	148

a The redundancy payment (in terms of weeks of award pay) is calculated as the relevant payment rate multiplied by the number of weeks remaining before the employee reaches age 65 years.

Source: Retirement and redundancy agreements

The costs to the stevedore of making an employee redundant are high. For example, an employee aged 58 years with 15 years service would be entitled to a redundancy payment equivalent to 148 weeks pay. Redundancy payments are substantial even for employees with short periods of service. For example, an employee (any age under 60) with three years service would be entitled to 78 weeks pay (table 6.2). A large number of redundancies could therefore impose a heavy financial burden on the stevedore.

In addition, employees are also entitled to accumulated sick leave, annual leave (with loading), long service leave (with loading) and superannuation entitlements.

Thus, while Australian Stevedores was prepared to trade these costs in favour of reducing the surplus of permanent employees in 1994, Patrick faces a substantially higher redundancy cost today because the number of potential surplus employees is much higher.

The stevedoring redundancy entitlement markedly exceeds that for employees under the *National Building and Construction Industry Award 1990*, the *Transport Workers Award 1983*, the *Storage Services — General — Interim Award 1990* and the *Metal Industry Award 1984*. These awards specify a maximum of eight weeks pay in total — compared to 148 weeks in stevedoring — for four or more years of service (table 6.3). The redundancy entitlements in

these awards are based on an AIRC test case (*Termination, Change and Redundancy* case (1984) 8 IR 34).

Table 6.3: Maximum voluntary redundancy entitlements under selected awards[a]

Agreement/award	*Redundancy provisions*[b]
National Building and Construction Industry Award 1990	Maximum eight weeks for four years or more service
Transport Workers Award 1983	Maximum eight weeks for four years or more service
Storage Services — General — Interim Award 1990	Maximum eight weeks for four years or more service
Metal Industry Award 1984	Maximum eight weeks for four years or more service

a For more detail see appendix J and the awards.

b Enterprise agreements are generally more favourable, providing for at least two weeks for each year of service up to a specified or negotiated maximum.

Sources: Various awards; enterprise agreements

However, in the industries in table 6.3, redundancy entitlements specified in enterprise agreements (or negotiated when redundancy situations arise) are usually more favourable than those specified in their respective awards. Enterprise agreements normally provide for at least two weeks base pay for each year of service, often limited to a specified maximum. If an employee was entitled to two weeks pay for each year of service, with no cap, and had 40 years of service, he or she would receive 80 weeks pay. Only certain combinations of weeks pay per year of service, length of service and maximum payouts would result in redundancy payments approaching the maximum payouts potentially available to stevedoring employees. For example, this could occur where an enterprise agreement specified four weeks base pay for each year of service; eligible employees had 37 years of service; and no maximum applied to redundancy entitlements below 148 weeks.

The high costs of redundancy in stevedoring not only restrict the ability to reduce the levels of permanent employees, but also limit the opportunities of those outside the stevedoring industry to enter by reducing the willingness of stevedores to *increase* the number of permanent employees. Management at one Australian workplace indicated reluctance to recruit more permanent labour given its obligations under the retirement and redundancy agreement. The company would prefer to employ supplementary employees, but hiring and use of supplementary employees is restricted under enterprise agreements (chapter 5). According to management at another Australian workplace:

> The *Retirement and Redundancy Agreement* has onerous redundancy clauses. It is the biggest deterrent to making employees permanent. The liabilities are huge.

The retirement and redundancy agreements also limit the stevedores' ability to allocate the best person to the job. Management at several workplaces noted that some clerks, when made surplus by the introduction of the computerised vehicle booking system, were retrained and redeployed to perform other tasks such as straddle carrier driving. This is because it was less costly than offering them redundancy packages. However, in terms of labour productivity, it may have been more efficient if the clerks had been given redundancy packages and people with the best skills and aptitude for operational areas were employed instead (appendix C).

Stevedores cannot nominate specific employees for redundancy, so the outcome may be that some of the most productive employees accept redundancy packages while less productive employees remain. However, this can also occur in unionised workplaces in other industries: few employers have absolute discretion in determining which specific employees will be made redundant.

The retirement and redundancy agreements are due to expire in late 1999. If such provisions remain, workplace performance will continue to be impeded.

6.3 Contracting

Provisions in enterprise agreements relating to the use of contractors and the current extent of contracting in the Australian container stevedoring workplaces examined are discussed in this section.

An overview of the general issues associated with contracting and an analysis of the costs and benefits in a number of case studies can be found in IC (1996).

For the Australian stevedoring workplaces examined, an important issue is whether management is able to outsource activities where it is deemed to be more efficient than in-house provision.

There is a general absence of provisions in enterprise agreements which either allow or preclude the contracting of functions except in the case of maintenance. Most agreements specifically allow the use of contractors for maintenance activities when the in-house skills, equipment and number of workers are insufficient to meet requirements (appendix J). The enterprise agreement at Patrick Brisbane states that contractors may be used when 'equipment or skills are not available to perform the required task' or when 'a heavy short term work load arises which is beyond the normal capacity of the

maintenance garage' (schedule 2). The P&O Ports Melbourne and CTAL Sydney agreements have similar provisions.

Most enterprise agreements generally allow the contracting of non-equipment maintenance services, except where existing activities are currently performed by terminal employees. Non-equipment maintenance covers the repair and maintenance of buildings, fences, paving, underground services and other facilities.

Some enterprise agreements also specify that contracting should not reduce the number of permanent tradesmen employed by the company. The enterprise agreement at P&O Ports Melbourne states that:

> WSCD [West Swanson Container Division] undertakes that the agreement reached as to the number of permanent tradesmen and their conditions of employment will not be diminished by the use of contract labour. The use of such contracting for the repair and maintenance of terminal equipment and facilities is not designed to replace permanent employees. (P&O Ports Melbourne Enterprise Agreement 1996, clause 3.8)

Provisions which formally preclude contracting where it would reduce the permanent workforce limit management's ability to outsource functions. Even for enterprise agreements without these provisions — where contracting out certain functions requires redundancies — the costs and difficulties associated with implementing such measures may constrain stevedores from proceeding.

While such provisions may restrict the scope to reduce permanent workforce numbers, they are less likely to constrain stevedores from using contractors to provide new rather than existing services. For example, Patrick Melbourne uses external contractors to operate its computerised truck booking system. Previously, when there was no booking system, trucks were loaded and unloaded on a 'first come, first served' basis, resulting in long and costly (to the exporter or importer) truck queues (ISC 1989a).

There is contracting out of some services such as building maintenance, major line marking work, office cleaning and security services at the Australian workplaces examined (table 6.4). Apart from occasional outsourcing of large specialised maintenance work, there is no regular use of contractors in the maintenance[3] of equipment. And there is no contracting out of stevedoring functions such as the driving of heavy equipment and lashing duties.

[3] Includes preventive and breakdown maintenance.

Table 6.4: Services contracted out at workplaces examined, 1997

Services contracted	*Sea-Land Adelaide*	*CTAL Sydney*	*P&O Ports Melbourne*	*Patrick Melbourne*	*Patrick Brisbane*	*Fergusson Auckland*
Office cleaning	yes	no	no	yes	yes	yes
Work area cleaning	no	no	no	yes[a]	no	yes
Security	no[b]	no	yes	no	no	yes
Maintenance:						
– buildings	yes	yes	yes	yes	yes	yes
– quay cranes	no[c]	no	no[c]	no	no	no
– other heavy equipment	no[c]	no	no[c]	no	no	no
– other vehicles	no[c]	no	no[c]	no[c]	no	no
Lashing	no	no	no	no	no	no
Truck booking system	na	no	no	yes	na	no
Reefer monitoring	yes	no	no	no	no	no
Line marking (major)	yes	yes	yes	yes	yes	yes

a Some outsourcing occurs.
b Service outsourced when no other employees are working onsite.
c On occasions large specialised work is outsourced.
na Not applicable.
Source: Workplace information requests

Apart from difficulties due to union resistance, managers indicated that there were also other reasons for the continued in-house provision of some services, including:

- additional duties may be required so that down drivers and other gang members are fully occupied through the shift; and
- ancillary services such as cleaning and security may be used to assist in rehabilitating injured employees.

Detailed discussions nevertheless indicated significant further scope to contract out services at the Australian workplaces examined. Some managers commented that cost savings could be achieved from the contracting of ancillary and equipment maintenance services. One manager did not view cleaning and security as 'core' functions of operational employees and suggested the company would contract these functions if not for likely union opposition. Another manager pointed to the relatively high cost of in-house maintenance

services, noting that it was cheaper to buy a new diesel engine than to have one repaired in-house.

More generally, the use of contractors instead of in-house employees is a potential means of increasing productivity, reducing labour costs and potentially improving reliability and timeliness at the Australian workplaces. A manager noted that if shift premiums and penalty rates could be avoided by contracting out services, the cost savings would be considerable. But the quality of the service provided by contractors would need to meet stevedores' requirements.

Good management practice would normally involve a case by case assessment of the viability of contracting out, by comparing the benefits and costs of alternative providers. However, provisions in the relevant enterprise agreements limit the extent of contracting out. These restrictions, by precluding access to potential efficiencies, are likely to detract from workplace performance. The ability to contract out would increase pressures on permanent employees to be competitive.

Detailed discussions with management at the Ports of Auckland (which includes Fergusson Terminal) in New Zealand, indicated that there were no restrictions on contracting. The Ports of Auckland decided during the reform period to compare the costs of all their services with the cost of contracting out. These outside comparisons were used to benchmark the company's objectives.

Despite the absence of restrictions on contracting at the Ports of Auckland, the extent of contracting is similar to that at the Australian workplaces examined. At the Ports of Auckland, ancillary services such as cleaning and security services are contracted, while equipment maintenance services are provided in-house (table 6.4). However, maintenance is outsourced at Wellington Stevedoring Services and, while the Port of Wellington performs its own maintenance, it has the ability to undertake maintenance for other workplaces.

The extent of contracting at the Ports of Auckland may have been influenced by reforms which improved the cost competitiveness of in-house employees. The introduction of flat hourly rates, in particular, may have reduced the cost differential between in-house and external provision of services.

6.4 Summary of findings

The Stevedoring Industry Award and some enterprise agreements give employment preference to union members. However, as a result of the Workplace Relations Act, union preference cannot be enforced. Nevertheless,

so far, union membership among operational employees at the Australian workplaces examined continues to be comprehensive.

Since the adoption of enterprise bargaining in the early 1990s, union involvement in the recruitment process has substantially diminished.

The retirement and redundancy agreements, introduced in 1992, are prescriptive and impose high redundancy costs on stevedoring companies. The high costs of industrial disputation to employers is a significant deterrent to stevedores' initiating redundancies. These costs restrict the ability of stevedores to reduce manning levels for permanent employees, which can lead to the retention of surplus labour. The retirement and redundancy agreements also foster skill mismatches, inhibit the recruitment of permanent labour, restrict the productive use of labour and reduce the ability of stevedores to allocate the best person to the job.

Redundancy entitlements for stevedoring employees are significantly more favourable than for employees under other awards examined. Enterprise agreements covering employees under these other awards generally specify redundancy entitlements above the levels in their respective awards. But in most cases the entitlements would still be considerably below those potentially available to stevedoring employees.

There have been few redundancies of permanent labour since the introduction of the retirement and redundancy agreements in 1992.

Good management practice would normally involve a case by case assessment of the viability of contracting out, by comparing the benefits and costs of alternative providers. However, provisions in the relevant enterprise agreements limit the extent of contracting out. These restrictions, by precluding access to potential efficiencies, are likely to detract from workplace performance.

7 REMUNERATION

Container stevedoring remuneration schemes are characterised by high shift premiums and penalties that reward time spent at work rather than the efficiency with which the work is undertaken. New remuneration schemes that annualise wages reduce incentives for permanent operational employees to undertake overtime, thus potentially improving productivity. But these schemes can lock in relatively high labour costs.

Although operational employees are on average paid for 45 hours per week, the actual hours that they attend work can vary greatly from week to week. The order of engagement and equalisation schemes facilitate equal access by permanent employees to high overtime, and reduce work able to be allocated to supplementary employees. This contributes to stevedoring operational employees earning relatively high wages compared to the average nonmanagerial employee in other industries.

Responses to the Research Issues Brief and detailed discussions at workplaces revealed that the primary concerns of many participants about the effects of the current remuneration schemes on container stevedoring workplace performance are that:

- premiums and penalties for shifts are relatively high;
- combined with other arrangements, such as the order of engagement, they provide incentives to 'create' overtime at high costs to workplaces;
- productivity bonus schemes, as currently designed and operated, do not eliminate the incentive to undertake overtime;
- while new aggregate wage systems — which have been introduced at two workplaces and are supported by the Maritime Union of Australia (MUA) for other workplaces — reduce incentives to undertake overtime, they can lock in relatively high labour costs;
- the hours worked are long and unsociable; and
- wages are relatively high and contribute to high service costs on the Australian waterfront.

These concerns are investigated in this chapter, along with the effects of remuneration arrangements on performance measures such as costs, productivity and reliability. Issues related to leave provisions are investigated in chapter 8.

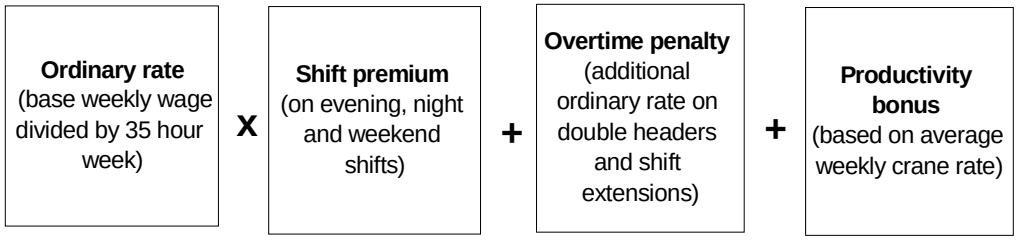
7.1 Remuneration schemes

Permanent operational employees are paid weekly either a 'base plus' wage or an average (aggregate) wage. The base plus system operates at all of the selected container stevedoring workplaces except Sea-Land and CTAL, which operate aggregate wage systems. Guaranteed wage employees are paid a base plus wage and are guaranteed a specified number of hours of work per week. Supplementary employees are usually paid a base plus wage which includes a 20 per cent loading — because they do not receive normal benefits of permanent employees such as annual leave. They are not rostered nor guaranteed a minimum number of hours.

The base plus system

Under the base plus system, operational employees are paid an ordinary rate of pay[1] on which premiums and penalties are applied for different shifts[2], as well as a productivity bonus, based on the average performance of the workplace over the week (box 7.1).

Box 7.1: Key components of remuneration



For most of the workplaces, weekly base wages range from $480.68 for a grade 1 operational employee, through to $700.54 for a grade 6 operational

1 The ordinary rate of pay is determined by dividing the base weekly wage as specified in the enterprise agreements by the average 35 hour week (ordinary hours).

2 And possibly by the hours for which they are available but not required for work.

employee.[3] These convert into hourly ordinary rates of $13.70 and $20.02, respectively.

Detailed discussions indicate that:

- approximately 50 per cent of gross wages are made up of the ordinary rate of pay on rostered shifts;
- overtime tends to be 20 to 30 per cent of gross wages, with around 15 per cent of gross wages being from shift premiums on rostered shifts;
- the productivity bonus can comprise 5 to 15 per cent of gross wages; and
- overtime and productivity bonus earnings can vary across workplaces.

However, the share of these components in gross wages can vary across workplaces and operational employees.

In comparison, all permanent operational employees at Fergusson Terminal in New Zealand received a flat rate of pay of NZ$21.70 per hour. Casuals are paid around half this rate — at NZ$12.50 per hour — and forego benefits common to permanent employment such as annual leave. Another New Zealand stevedore had a base pay of NZ$18.50 per hour, an overtime rate of NZ$21.40 per hour and a casual rate of NZ$16.00 per hour.

Operational employees at Fergusson Terminal are not classified into job grades at the terminal. Moreover, they do not receive premiums or penalties (except for an extra NZ$30.00 for the midnight shift) or productivity bonuses for any shifts. Total earnings of crane drivers and foremen are typically around NZ$65 000 per year. This puts New Zealand stevedore operational employees in the national upper earnings quintile in New Zealand (appendix I).

Shift premiums

The *Stevedoring Industry Award 1991* specifies that weekday evening shifts are paid at 1.5 times the base rate, while weekday night shifts are paid at twice the base rate. Distinctions are also made between rates payable for shifts between Friday night and Sunday night. Employees on these shifts can earn hourly wages between two and two-and-a-half times the ordinary rate.

The shift premiums for stevedore operational employees are higher than for employees under other awards examined in this study (table 7.1 and appendix J).

[3] Derived from selected enterprise agreements.

Table 7.1: Comparison of shift premium provisions in selected awards (multiples of ordinary rate of pay)

	Weekday[a]			*Weekend*	
	Day	*Evening*	*Night*	*Saturday*	*Sunday*
Stevedoring Industry Award 1991	1	1.5	2	2–2.5	2.5
National Building and Construction Industry Award 1990	1	1.5	1.5	np	np
Transport Workers Award 1983	1	1.175	1.3	1.5	2
Storage Services – General – Interim Award 1990	1	b	b	b	2
Metal Industry Award 1984	1	1.15	1.5	1.5	np

a Timings of day, afternoon (evening) and night shifts can vary slightly between awards, but they are broadly comparable.

b Work undertaken outside the hours of 7 am to 5.30 pm — or more than eight hours in a day — is paid at 1.5 times the ordinary rate for first two hours, then double time for remaining hours worked.

np No provision.

Source: Various awards

It would be expected in principle that different wage rates should apply to different shifts because employees typically prefer some shifts to others. One would expect wage rates for night shifts to be higher than for day shifts, for example. Similarly, higher wages may emerge for irregular shifts, to compensate for the inconvenience and disruption to non-working life caused by such shifts. However, if the wage rate for less preferred shifts more than compensates workers for this preference, then there will be an incentive for them to direct work away from day shifts to night shifts. If anything, community acceptance of work outside of standard hours has been rising, which may imply the need for lower premiums for these shifts.

Penalties

Penalty rates of pay are specified in the Stevedoring Industry Award and are paid on most shifts undertaken as overtime (table 7.2).[4] These penalties,

4 Voluntary overtime on rostered days off is paid at the premium rates but does not attract penalties.

combined with the shift premiums, create overtime rates of pay that are well above other awards examined in this study (appendix J).

Table 7.2: Penalty rates for double headers and shift extensions

Type of overtime	*Hourly shift penalty*
Double headers on Monday to Friday	Ordinary rate plus the rate for the shift worked
Double headers on Saturdays, Sundays and public holidays	Half the ordinary rate plus the rate for shift worked[a]
Shift extensions	Ordinary rate plus rate of the shift extended into[a, b]

a Note that shifts on weekends receive premiums of between two and two-and-a-half times the ordinary rate. Therefore weekend double header shifts, despite receiving half the ordinary penalty rate, are more expensive than a double header on a weekday shift.

b Except at Sea-Land shift where extensions are paid at the ordinary rate plus the rate of the previous shift.

Source: Stevedoring Industry Award

Double headers are generally worked following the day shift. For Monday to Friday, double headers are paid at the ordinary rate plus the rate appropriate for the additional shift. On Saturdays, Sundays and public holidays, time is paid at half the ordinary rate in addition to the rate appropriate to the additional shift. The minimum rate payable for a double header shift is two-and-a-half times the ordinary rate and the maximum payable is three times the ordinary rate (on weekends).

The incidence of double headers, shift extensions and voluntary overtime varies between workplaces. Operational employees at Patrick Brisbane, for example, undertake relatively few shift extensions, while 14 per cent of weekday labour is undertaken as a double header. Similarly, Sea-Land's aggregate wage calculations indicate that workers are expected to undertake almost five times the amount of overtime as double headers rather than shift extensions. In comparison, operational employees at P&O Ports Melbourne undertook almost one-third more overtime through shift extensions than through double headers. The other workplaces placed more emphasis on double headers.

There are some constraints on the amount of overtime undertaken during a roster cycle. First, the Stevedoring Industry Award specifies that operational employees are only obliged (if requested) to undertake two double headers per week. Second, on rostered weeks off, operational employees are ineligible to attend work.

However, as noted in chapter 4, the order of engagement can also influence the eligibility of operational employees to undertake overtime. At most of the Australian workplaces examined, permanent employees are given access to

double header shifts (to a limit of two) before supplementary employees are engaged.[5] This is more costly than engaging supplementaries, because a supplementary would not be undertaking the shift as overtime and therefore would not be paid the penalty rate.

Moreover, on unrostered weekend shifts, permanent employees are granted voluntary overtime before supplementary employees are used. Equalisation schemes provide permanent employees with the opportunity to share these earnings (chapter 4).

Apart from the labour cost, high levels of overtime can have other performance consequences, such as lower productivity and a higher risk of accidents resulting from fatigue (chapter 3). The MUA, for example, acknowledged:

> It was only natural that productivity levels would begin to fall when workers were doing up to 60 to 70 hours per week ... You can't expect people to stay alert on the job and do their best when they have been labouring 16 hours a day. It does nothing for efficiency or job safety. (MUA 1995, p. 10)

The MUA has sought to reduce overtime though the introduction of rostered time off provisions (chapter 8) and the recruitment of workers — such as guaranteed wage employees — on different contracts of employment (MUA 1994b, pp. 9–11).[6]

In addition, the number of double headers that can be required by management in a week has been restricted to two. The safety implications of high levels of overtime were also emphasised in detailed discussions in New Zealand, where a maximum number of hours per week has been introduced at some workplaces (appendix I).

7.2 Productivity schemes

Relatively high premiums and penalties can create incentives for employees to work less quickly, so that work in higher premium and penalty shifts is available. Moreover, the order of engagement at most Australian container stevedoring workplaces guarantees permanent operational employees preferred

[5] As part of the Productivity Employment Program scheme package at CTAL, supplementary employees are engaged before operational employees undertake double headers. This is discussed in further detail in section 7.5.

[6] Anecdotal evidence and Australian Bureau of Statistics unpublished data suggest that overtime rose during the Waterfront Industry Reform Authority process. Overtime levels appear to have since declined to pre reform levels.

access to any overtime shifts before other employees.[7] In combination, this creates a perverse incentive system which rewards employees for time spent at work, rather than for the efficiency with which they undertake the work.

The MUA has suggested that 'a big percentage of the so called eighty thousand dollars that these people earn comes out of their productivity bonus' (Coombs 1997, p. 4). Whether productivity bonuses are substantial enough to offset the incentive to seek premiums and penalty rates is investigated in this section.

Productivity schemes operate at each Australian workplace examined. They are specified in the enterprise agreements, and reward operational employees with bonus payments for the average number of container lifts achieved each week.[8] At some workplaces, these payments are supplemented with bonuses for the average number of containers moved by road vehicles in the week. Their objective is to encourage operational employees to work more quickly (more container moves per hour) and thereby improve timeliness and reduce overtime costs.

There is an inherent conflict between the base-plus pay systems that reward operational employees for hours spent on the job, and the productivity bonus schemes that reward them for quicker work. Given a fixed volume of work, an increase in productivity means less hours are needed to complete a task. Operational employees must weigh the benefits of generating more income through the productivity scheme, by working more efficiently and effectively, against the extra income gained by working longer hours through overtime and foregoing leisure time. Robinson and Everett, in a review of existing productivity scheme incentives, concluded that:

> any substantial or sustainable increase in stevedoring productivity at container terminals will only result, under present industrial relations conditions, from major reformulation of Enterprise Agreements in such a way as to ensure that productivity is more highly rewarded than time spent on the job. (response 10, p. 32)

[7] The CTAL Sydney agreement allows supplementary employees to be engaged before permanent employees on double header shifts.

[8] Productivity payments are mainly determined by the crane rate. A sliding scale bonus is paid on all crane lifts above a threshold to create a bonus pool. The bonus is paid on all lifts in the week based on the average crane rate for the week. The payable lift average ranges from 15 to 30 lifts per hour over the course of the week. At some workplaces a similar style of bonus system operates for the 'road rate' (container moves by road machinery such as straddle carriers and forklifts) as well.

While productivity bonus payments can vary between workplaces (for example, $5000 per person per year at Sea-Land to $11 000 at CTAL),[9] they represent a relatively small proportion of gross wages.[10] Overtime and shift extensions at P&O Ports Melbourne, for example, represent 30 per cent of the wages bill, while productivity bonuses represent 13 per cent. Similarly, in both the CTAL Sydney and Sea-Land agreements, productivity payments can be estimated to represent about 8 per cent of total wages. Consequently, productivity bonuses only account for a small proportion of the total wages bill to work a ship.

Crane rates can vary substantially between ships at the same workplace for a variety of reasons (appendix E). Some operational employees considered that productivity bonus schemes could be adjusted to account for the degree of difficulty associated with working particular ships.

Productivity schemes are pooled at the workplaces examined. Under such schemes, the workplace earnings pool is distributed equally among the permanent workforce. At some workplaces this occurs regardless of whether employees performed work in the week or not (including operational employees on leave).[11]

There can be 'free rider' problems with the pooled productivity schemes which sacrifice penalty payments in exchange for higher productivity bonuses. Individual operational employees, and indeed gangs, may have an incentive not to participate actively in achieving the productivity levels encouraged under the scheme, but simply to share in the dividends of the schemes. The incentive to free ride will be high when employees undertake tasks they feel have no direct impact on the level of productivity. Employees who are likely to see a direct effect of their work on productivity are crane operators, and straddle drivers moving containers from the crane.

Careful design of productivity schemes is needed to ensure that unintended outcomes do not occur. Both objective or quantitative measures of productivity, such as crane and road rates,[12] and subjective measures, such as those relating to quality, are important. Work can be efficient in that it produces more with less

---

9 Based on operational employees achieving productivity targets projected in the respective enterprise agreements.

10 Given that workplaces divide the bonus pool among the permanent workforce, weekly payments to individuals between workplaces are likely to vary considerably.

11 At P&O Ports Melbourne, operational employees on Workcare are excluded from the pool division.

12 The road rate is based on the container moves by machinery from the quay crane to the yard.

(for example, more crane lifts in fewer hours), but it may not necessarily be of a sufficient quality. Detailed discussions at CTAL highlighted difficulties experienced with the Productivity Employment Program scheme's design of crane rate and road rate bonus contributions to the productivity bonus pool. It appears that operational employees realised that it was easier to achieve the productivity bonus under the road rate bonus than under crane rate bonus. This resulted in containers being stowed in incorrect locations and time was wasted looking for lost containers. Performance suffered accordingly.

The fact that — in practice — the earnings from overtime continue to outweigh those from productivity bonuses, indicates that the incentives in the current schemes to work more efficiently and reduce the incidence of overtime may not be of a sufficient magnitude or design.

7.3 The 'aggregate wage' approach to remuneration

Aggregate wage schemes are recent developments in container stevedoring. However, they are not uncommon in other industries. Under these schemes, annual gross wages are based on a prescribed set of shifts on which ordinary, premium — and in some cases — penalty rates are paid as an average weekly wage. Sea-Land and CTAL currently operate forms of aggregate wage systems.

Under the Sea-Land system, operational employees are paid an aggregation of their previous year's salary based on an average working week. The scheme assumes that a set amount of shifts — on which premiums and penalties are paid — are worked within the year. The aggregate wage includes:

> ... all award nominated rates which cover the base rate, overtime, public holidays, shift penalties, consolidated allowances, meal monies, annual leave loading, productivity scheme payments. (Sea-Land Enterprise Agreement 1997)

Permanent operational employees have to undertake the prescribed average hours of overtime or the equivalent of single hours. A weekday night shift is equivalent to two weekday day shifts, for example.

The Sea-Land aggregate wage is estimated to range in 1997 from around $58 760 for a grade 2 operational employee, through to $74 780 for a grade 6. These wages convert to average weekly wages of around $1130 and $1440 respectively — well above the base weekly wage. Earnings can be higher because there is the opportunity for operational employees to undertake extra overtime.

Permanent operational employees at CTAL receive an average weekly wage which is calculated on a higher hourly rate than the existing rates at workplaces

using base plus wages systems. Also under the new wage structure, the existing six Stevedoring Industry Award grade levels have been converted into four skill levels. Excluding productivity payments, grade 1 operational employees can earn approximately $47 000 per year while grade 6 equivalent operational employees can earn around $59 000 per year.[13] Permanent employees can undertake overtime on weekend shifts for which they are not rostered before supplementary employees. However, the order of engagement has been changed to allow supplementaries to undertake work before double headers on weekdays and weekends, so that overtime can be reduced.

A feature of the CTAL agreement is higher productivity payments than provided by Sea-Land if productivity targets are met. CTAL employees can earn around $11 000 in productivity bonuses, whereas Sea-Land employees can earn $5000.

The aggregate wage systems examined reduce some of the incentive to undertake overtime, but they also have resulted in other additional labour costs. Apart from the higher wage payments for rostered shifts, the high average weekly wage leads to higher annual and sick leave payments and higher rostered time off payments than under the previous wage scheme. Importantly too, the aggregate wage systems include higher employer contributions to superannuation. All CTAL and nearly all Sea-Land operational employees are superannuated at around $710 per week under the aggregate wage systems. Previously, the figure was the base weekly wage for each grade classification.

The MUA's policy is to introduce an aggregate wage at all other container stevedoring workplaces (MUA 1997e, p. 9). This reflects a national trend in enterprise agreements to convert wages plus overtime earnings into salaries (Sloan and Robertson 1997, p. 9).

One advantage of the aggregate wage for operational employees is the reduction in downward wage uncertainty. Employees know that they will receive the hours of work required to maintain a certain minimum level of wages. This appears to have reduced the amount of overtime that is being undertaken by operational employees at Sea-Land. In detailed discussions, management at Sea-Land considered that the aggregate wage has had a positive impact:

> The aggregate wage has increased the stability in employee's lives. Before, there were big weekly fluctuations in income. It has taken away the drive for the almighty dollar, that is the need to work overtime. This has led to a big cultural change.

[13] Estimated gross earnings for 1996–97. Estimates do not inlcude possible productivity bonus earnings or overtime opportunities which may arise.

Another positive effect from the operational employees' perspective is that they are able to budget personal finances with more certainty. One employee noted that banks were more willing to grant him a housing loan based on his aggregate wage than under the base plus system. However, operational employees can still undertake overtime above that specified by the aggregate wage. This is possible because the order of engagement at Sea-Land still places permanents working double headers above supplementaries.

The difference in the order of engagement at Sea-Land and CTAL needs to be considered in light of the mix of permanent employees and supplementary employees at each workplace. Sea-Land retains an order of engagement which gives preference to permanent employees on double headers over the use of supplementary employees, although it has recently employed more permanent employees through the Australian Vocational Training program, thereby reducing the opportunity to undertake double headers. CTAL, in comparison, has an order of engagement which gives preference to supplementary employees over permanent employees working double headers. However, the supplementary labour pool accounts for less than 10 per cent of the workforce at CTAL (table 5.5) and the recruitment of new supplementary employees appears to be limited (chapter 5). Further, double headers can still be required for shifts when there are insufficient supplementaries to meet demand.

In aggregate wage schemes, shift premiums and penalties are not directly linked to the wages received in any particular week. Averaging means that operational employees are paid the same for all shifts. Premiums and penalties become partly 'hidden'. This should mean that operational employees become indifferent (from an income perspective) to different shifts. However, shift premiums and penalties still exist at Sea-Land in the sense that operational employees need to complete an aggregate number of hours. By working more premium and penalty shifts, operational employees can complete their hours more quickly, because two weekday day shifts are still equivalent to one weekday night shift.

Maggs, Testi and Rimmer (1996, p. 8) noted that when incorporating wage components such as premiums and penalties into a single rate, they are less vulnerable to attempts to erode established entitlements. The protection of these rates appears to be a key feature of the MUA aggregate wage policy:

> The policy is in response to a hostile political environment. The Howard Government is moving to dismantle awards to members and with them overtime and shift penalties, leave loadings and extra rates. An aggregate wage incorporated in all enterprise agreements can protect these hard won conditions. (MUA 1997e, p. 9)

John Coombs, National Secretary of the Maritime Union of Australia, was more explicit, observing that '... the aggregate wage defends our shift loadings, by locking them into a set wage' (MUA 1997e, p. 9). High wages remain built into the schemes. The Government's new industrial legislation is one factor driving the Maritime Union of Australia policy:

> The threat to collapse award conditions in the new legislation and the collapse of the comprehensive awards into 20 allowable basic provisions, combined with the pressure to reduce them into so called community standards by July 1998 creates an urgent need to protect award conditions and introduce aggregate wages in all industries covered by the union. (MUA 1997e, p. 9)

7.4 Hours worked

Stevedoring operational employees are paid hourly rates for time spent at work or being available for work. The MUA accepts that its members are relatively highly paid, but emphasises that operational employees undertake long hours of work:

> Stevedoring workers employed in the big container terminals can average around $70 000-$80 000 per annum by working day and night, anything from 50-80 hours a week and being paid penalty rates, allowances etc. (MUA 1997a, p. 6)

According to the Australian Bureau of Statistics, in 1996 — within a particular pay period — stevedoring operational employees were paid for 36.1 hours of ordinary time on average (table 7.3). They were also paid for nine hours of overtime per week, giving a total paid average of 45 hours per week. Average *paid* hours of work are likely to be higher than the average *actual* hours operational employees attend work, because of payments made for idle and call up time, various forms of leave and rostered time off.

In stevedoring, overtime occurs when operational employees undertake extra shifts or shift extensions above those prescribed in the roster. Overtime can consist of double header shifts, shifts worked on rostered days off and public holidays and the extension (by up to three hours) of rostered shifts. As discussed in chapter 4, the order of engagement — by giving permanent employees preference to overtime above supplementary employees — is a driver of relatively high levels of overtime.

Given the variable nature of container stevedoring demand, the design of rosters and order of engagement rules, actual hours of work attended within specific weeks of a roster may vary considerably.[14] Shift lengths at workplaces range

[14] Data at the workplace level on the distribution of hours worked and overtime were not available.

between seven and eight hours, for example. The number of days rostered on in any one week can vary, as can the number of rostered days off. In some weeks, permanent operational employees may attend work for five consecutive seven and a half hour evening shifts (that is, 37.5 hours). In other weeks, they may work six consecutive seven and a half hour day shifts (45 hours per week). Permanent operational employees undertaking two double headers in such a week could attend work for approximately 60 hours during the week. On the other hand, they may also be rostered off for seven consecutive days (meaning no hours of attendance that week) at certain times in a roster (chapter 8).

Table 7.3: Average weekly ordinary and overtime hours paid, 1996[a, b]

	Stevedoring industry[c]	*All industries*
Ordinary	36.1	37.9
Overtime	9	2
Total	**45.1**	**39.9**

a Ordinary hours refers to award, standard or agreed hours of work paid at the base rate, including shift premiums in specified awards.

b Based on a survey of operational employees' actual hours worked in a particular pay period. Data may not include some operational employees on leave and rostered time off.

c Includes container, break bulk and some bulk operations. Coal and wheat terminals are excluded from the ABS definition.

Source: ABS unpublished statistics

It has been suggested that stevedore employees work excessively long hours — up to 80 hours per week. To work 80 hours per week, operational workers would have to attend (over and above their rostered shifts) more than two double headers, voluntary overtime on weekend shifts and shift extensions. Detailed discussions indicated that the occurrence of such a work sequence is rare.

When the hours worked are long and variable, they can have deleterious effects on the social and family lives of operational employees. For example, Jim Donovan, Assistant Secretary of the Maritime Union of Australia, observed that when employees worked long hours:

> their wives and families barely saw them. And when they did get home they were far too tired to show much affection or lead a normal married life. Divorces on the waterfront were becoming all too common. (MUA 1994b, p.10)

7.5 Wage levels

The relatively high premiums and penalties, provisions which ensure preferential access to overtime, and productivity schemes which lead to some bonuses, together result in permanent container stevedoring operational employees in Australia being relatively highly paid.

Average total earnings[15] of grades range from $62 000 to $101 000 per year at the workplaces examined (table 7.4). Grade 6 employees (such as foremen) are the most highly paid among operational employees. Most permanent operational employees are either grade 4 or 5, with earnings in the range shown in table 7.4. Higher grade employees tend to undertake more skilled tasks with greater responsibilities. Entry skill levels are minimal, with most higher grade skills being gained through on-the-job training and experience (table 7.4).

Table 7.4: Average annual earnings[a], permanent operational employees, Australian workplaces examined, 1996-97

Grade	*Main responsibilities*	*Earnings range*
6	Supervisory tasks	$75 000 to $101 000
4-5	Operation of heavy and complex equipment; clerical duties; liaison with supervisory employees	$65 000 to $92 000
3[b]	Operation of heavy equipment; general clerical duties under supervision	$62 000 to $80 800

a Includes all ordinary, premium and penalty payments, bonuses and allowances.

b Australian vocational trainees and other trainees are generally classified as grade 3.

Sources: Workplace information requests; Stevedoring Industry Award; enterprise agreements

Management salary packages are detailed in employment contracts which are confidential.

Variations in earnings between permanent operational employees within grades at individual workplaces are limited by equalisation schemes (chapter 4). These schemes aim to ensure that permanent operational employees within the same grades at individual workplaces have the same access to higher premium and penalty shifts or equivalent base rate shifts — and therefore similar earnings potential — regardless of individual work performance. For example, Patrick Melbourne has a clause in its enterprise agreement which states that equalisation points will be 'kept within a tolerable range of 30 points either side' (that is, 60 hours).

15 Includes all wages from rostered shifts, overtime, productivity bonuses and allowances.

In 1996, operational employees in the stevedoring industry[16] on average earned around $1390 per week ($72 000 per year) — placing them in the top 5 per cent of wage and salary earners in Australia — and more than double the average (around $660 per week or $34 000 per year) for employees in other industries (ABS 1996a). Similarly, stevedoring managerial employees earned around $930 per week, which was more than the $870 per week earned by the average managerial employee in other industries.[17]

Individual enterprise agreements contain a wage indexation clause that can raise base wages in some circumstances by up to 4 per cent annually. Some agreements specify that if the consumer price index exceeds this figure the parties will confer to determine an appropriate increase in wage rates, while other agreements specify that if the consumer price index exceeds 4 per cent, then the base weekly wage rates shall be increased by the index figure. However, the consumer price index rose by less than 3 per cent between 1996 and 1997 (ABS 1997d). In detailed discussions, one workplace reported that a pay rise of 6 per cent occurred in 1996 as a result of agreement negotiations.

In detailed discussions, permanent operational employees drew attention to the high incidence of workplace accidents. Stevedoring workplaces have a higher incidence of compensated accidents than all other industries (appendix G). Higher earnings may partially reflect the premium placed on working in this more dangerous environment (see Miller, Mulvey and Norris 1997, p. 363). However, overtime is a significant proportion of earnings and, as acknowledged by the Maritime Union of Australia, may be a contributor to poorer workplace safety. In principle, if a premium is to be paid to reflect more dangerous conditions, it should be priced such that inappropriate incentive structures do not emerge.

7.6 Summary of findings

Shift premiums and penalty rates are higher in the Stevedoring Industry Award than other awards examined in this study. They reward time spent at work rather than the efficiency with which the work is undertaken. The order of engagement and equalisation schemes facilitate permanent operational employees' access to high levels of overtime. This is more costly than engaging supplementary

[16] Includes container, break bulk and some bulk operations. Coal and wheat terminals are excluded from the ABS definition.

[17] Information on individual salary packages of managers at the workplaces examined were not available because they are confidential.

employees, because they would not be undertaking the shift as overtime and therefore would not be paid the penalty rate. Shift premiums, penalties and the order of engagement can create disincentives for permanent operational employees to work efficiently and effectively and complete work in a timely manner.

Earnings from overtime continue to outweigh those from productivity bonuses. Therefore, the incentives provided by the productivity bonus schemes to work more efficiently and reduce the incidence of overtime may not be sufficient. The pool based design of productivity schemes do not create a strong incentive for individual operational employees to work more efficiently and effectively.

An aggregate wage has been introduced at two of the workplaces examined. It has introduced some wage certainty for permanent operational employees and reduced the incentive to seek overtime. However, at Sea-Land overtime is still factored into the aggregate wage and the order of engagement ensures access to it. At CTAL the aggregate wage schemes allows for supplementary employees to be used before double headers; however, the number of supplementaries that can be engaged remains limited. The schemes negotiated thus far can create additional labour costs through higher leave and superannuation payments and also lock in relatively high wages.

At the Australian workplaces examined, stevedoring operational employees are paid for similar amounts of ordinary time hours to that of other workers, but are paid for more overtime hours. The hours operational employees actually attend work within roster cycles can vary greatly. Within individual weeks in a roster cycle, for example, an operational employee may be rostered off or could work up to 60 hours (for example, by working six days in a row with two double headers). According to Australian Bureau of Statistics data, operational workers were paid for around 45 hours per week in 1996, however the average hours of work actually attended are likely to be less than this.

Permanent operational employees in the Australian workplaces examined receive relatively high earnings. The higher incidence of accidents in the industry is a factor, but the high earnings result primarily from overtime, which itself may be a contributor to workplace accidents. Among the Australian workplaces examined, the existence of equalisation schemes means that wages do not vary greatly within grades at workplaces.

8 PAID NON-WORKING TIME

A number of work arrangements result in time that is paid for by employers, but not actually worked by employees. These include longer than agreed shift breaks and shift changeovers — which can average around 1.8 hours per ship — minimum call-up payments, paid idle time and leave provisions. Paid idle time is one feature of permanent employment which distinguishes it from supplementary labour. The costs of some paid non-working time, such as shift extensions, are magnified by excessive manning requirements. Other forms of paid non-working time, such as call-up payments, can act as constraints on rostering and labour allocation.

Some work arrangements in container stevedoring enable operational employees to be paid for time when not they do not undertake work tasks. These include leave provisions, longer than specified breaks and shift changeovers, and minimum shift payments (such as shift extensions and idle time). Some of these arrangements are common in other industries and reflect community norms, but there are concerns that their length and cost are unnecessarily high in container stevedoring. Some paid non-working time may be unexpected and therefore not planned for by management. Although the amount of unexpected paid non-working time is likely to be small relative to expected arrangements, it can have significant effects on workplace performance. These issues are investigated in this chapter.

8.1 Leave arrangements

Permanent stevedoring employees are entitled to more formal absences from the workplace than employees under other awards examined in this study. Relatively long leave absences and higher remuneration payments attached to such leave[1] create extra costs for workplaces, not only through direct payments to workers on leave, but also through the need to provide suitable replacement

[1] Leave provisions include annual leave, sick leave, holidays, long service leave and rostered weeks and days off.

labour. This can translate into higher manning levels and because of the order of engagement, higher overtime costs (chapter 5 and chapter 7).

In table 8.1, the days of absence from the workplace[2] provided for in the *Stevedoring Industry Award 1991* are compared to other awards examined in this study. The number of days that workers can be absent from the workplace are higher in stevedoring. The cost of leave is also generally higher, with loadings of 27.5 per cent on annual and long service leave, compared to 17.5 per cent and no loading, respectively, for the other relevant awards.

Table 8.1: Operational employee absences excluding rostered time off

Operational employee absences	*Stevedoring Industry Award 1991*	*National Building and Construction Industry Award 1990*	*Transport Workers Award 1983*	*Storage Services – General Interim – Award 1990*	*Metal Trades Industry Award 1984*
Annual leave	25	20	20	20	20
Sick leave	10	10	8	10	8
Public and industry holidays[a]	12	10	11	11	11
Long service leave[b]	4.3	4.3	4.3	4.3	4.3
Total days	**51.3**	**44.3**	**43.3**	**45.3**	**43.3**

a Assumes Victorian example.

b Equivalent of 13 weeks for 15 years. Pro-rata after 10 years.

Source: Various awards

Leave absences reduce the availability of operational employees to approximately 50 per cent on weekday shifts (chapter 6). In comparison, Fergusson Terminal employee availability is around five percentage points higher. The incidence and effect of higher leave provisions can in some instances be exacerbated in the container stevedoring industry because of the constraints on engaging labour. For example, the order of engagement and potentially the size of the supplementary pool can limit the ability of workplaces to find the best mix of permanent and supplementary employees. Higher levels of leave can result in larger numbers of permanent employees.

2 The table excludes rostered weeks off and accrued day provisions which in stevedoring can account for an extra 50 days of leave per year.

Annual leave

Permanent operational employees receive five weeks annual leave.[3] This is above the four weeks generally received by workers under other awards examined in this study (appendix J).

However, five weeks leave is consistent with arrangements for those other industries where employees undertake shift work. For example, it was noted by the Inter-State Commission that:

> [t]he generally accepted industry standard under federal awards for paid annual leave is twenty eight consecutive days (or four weeks) leave per annum. However, shift workers who are rostered seven days a week and regularly work on Sundays and public holidays receive an additional seven consecutive days leave per annum. (ISC 1988, p. 138)

Not all permanent operational employees meet the Inter-State Commission shift work criteria of being rostered on seven days a week and regularly working on Sundays and public holidays. For example, at some workplaces examined some operational employees are only rostered on the five weekday day shifts. Most permanent operational employees are not rostered on Sundays and are only rostered on some Saturdays.[4]

If the average grade of employees at a workplace is grade 4 and there are 300 operational employees, the additional direct costs could be approximately $235 000 per year.[5] Added to this are the costs of hiring labour to undertake work in the weeks operational employees take the extra week of annual leave (in this case approximately equivalent to six full-time employees).

Annual leave loadings are also relatively high in the stevedoring industry. Permanent operational employees receive an annual leave loading of 27.5 per cent, 10 percentage points higher than employees working under a selection of other awards (table J.2).

---

3 Guaranteed wage employees receive annual leave on a pro-rata basis.

4 Operational employees at Patrick Brisbane, for instance, are not rostered on weekends. Rather, weekend shifts are voluntary overtime. However, they work either day, evening or night shift on weekdays. Sea-Land operational employees do work some rostered Saturdays — approximately 14 for the year — but are not rostered on Sundays.

5 Based on the base weekly wage and includes leave loading (chapter 7). But the costs per operational employee are even higher for workplaces with the aggregate wage because agreement provisions require that the leave be paid at the average weekly wage rather than the lower base weekly wage.

Sick leave

Permanent stevedoring operational employees receive 10 days sick leave per year and the entitlement is cumulative. This is comparable to the building and construction and storage services industries. Employees under the other relevant awards generally can only accumulate around eight days of sick leave. Operational employees on sick leave are generally paid at the base weekly wage rate.[6]

However — unlike other awards examined in this study— the Stevedoring Industry Award includes provisions which allow operational employees to have some sick leave paid in lieu of taking leave. Employees may elect to have accumulated sick leave in excess of 28 days paid out at the ordinary rate of pay (Stevedoring Industry Award, clause 28(g)).

Rostered weeks off and accrued days

Permanent operational employees can accrue time off by working longer than the 35 ordinary hours of work — specified in the Stevedoring Industry Award — in some weeks. Rostered weeks off can be accrued through working longer shifts but being paid for standard lengths and by foregoing some shift premiums.[7] At most workplaces, permanent operational employees undertake an extra half hour each weekday shift without pay.[8] In addition, at most workplaces permanent operational employees accrue seven hours on rostered weekend shifts for being paid the ordinary rate for the shift instead of double time. It is the accruals on rostered weekend shifts that make it possible to accrue the rostered weeks off so frequently (generally every seven weeks).[9]

At some workplaces, permanent operational employees also receive a 25 per cent loading on rostered weeks off wages to compensate them for the inability to earn shift premiums on rostered weeks off. This is despite the fact that they earn shift premiums while accruing the rostered weeks off. The 25 per cent loading is combined into permanent operational employee consolidated allowances. The cost of this provision for a grade 4 operational employee

---

6 However, operational employees receiving an aggregate wage are paid at the higher average weekly wage rate (chapter 7).

7 Generally, operational employees' rosters allocate approximately seven rostered weeks off per year.

8 However, Brisbane operational employees accrue one rostered week off every eight weeks through working eight hour shifts on seven hours pay five days per week.

9 However, under some rosters the rostered weeks off accruals add to less than 35 hours.

(assuming approximately seven rostered weeks off per year) is approximately $1000 per year.

Permanent operational employees can also accrue a day off by accepting overtime wage reductions equivalent to a day shift payment. Accrued days are generally limited to five per year and credited from trading off double header shift payments.

Perverse incentives therefore exist whereby lower productivity can be rewarded with the opportunity for accrued leave. Because of the order of engagement, operational employees taking an accrued day of leave may also be creating overtime opportunities for other operational employees. Additionally, in conjunction with the order of engagement, these leave provisions can create pressure for workplaces to hire additional permanent employees to cover for periods of operational employee absences.

Holidays

Permanent operational employees generally receive only slightly more holidays (public and industry) than employees under a selection of other awards (table J.4 and appendix J). For example, in New South Wales and Victoria, permanent operational employees receive between one to two extra public holidays per year relative to workers under other selected awards.

Long service leave

Permanent operational employees are entitled to 13 weeks of long service leave after 15 years of service and can access the leave pro-rata after 10 years of service (table J.3). The *Metal Industry Award 1984* specifies an amount of leave which is the same as that for stevedoring operational employees. However, most of the selected awards do not contain long service leave provisions. Employees under these awards are covered by various state government long service leave acts which specify similar leave amounts to the *Stevedoring Long Service Leave Award 1992*.[10]

Importantly, permanent operational employees receive a 27.5 per cent loading on long service leave. However, employees covered by other selected awards and provisions in various state government long service leave acts do not

[10] For example, workers in South Australia receive 13 weeks after 10 years and NSW 13 weeks after 15 years.

receive such a loading. For a grade 4 worker receiving the base weekly wage on 13 weeks of leave, for example, the loading would be approximately $2100.[11]

8.2 Shift breaks, delays and unplanned absences

Management at most of the Australian container stevedoring workplaces examined were primarily concerned about delays that related directly to the attitude and motivation of operational employees, such as longer than necessary breaks and delays in changing shifts, particularly under continuous work arrangements.[12]

Although the amount of this paid non-working time is likely to be small relative to formal arrangements it can have significant effects on workplace performance.

The Stevedoring Industry Award specifies that during a normal shift, an employee is entitled to paid rest breaks totalling 45 minutes.[13] These rest periods may be either staggered — to allow for continuous work shifts and less 'downtime' — or non-staggered. But longer breaks can occur (box 8.1).

Delays specifically associated with shift changeovers were examined in data provided by three Australian workplaces. On average the delays associated with shift changeovers ranged between 1.7 to 2.0 hours in lost crane working time per ship across the workplaces. If these delays could be reduced, ship turnaround times could be improved commensurately.

During detailed discussions, some managers commented that they favoured the continuous work shift approach because they believed it provided helpful incentives and 'built up a momentum'. Managers at Sea-Land Adelaide noted:

> The benefits [of continuous work shifts] are that the drivers get ... [angry] if the down drivers are late back from their smoko and the drivers have been waiting for them.

---

[11] The cost is higher for workplaces operating an aggregate wage. For example, a grade 4 operational employee receiving an average weekly wage of $1285 would receive approximately $4600 in loadings for 13 weeks of long service leave.

[12] Delays can occur for many reasons including inclement weather, mechanical failure, need to undertake special operational tasks (such as cage work and lashing), late delivery of containers, and longer shift breaks and change overs. Clearly not all delays are unnecessary, undesirable or unavoidable.

[13] When an employee works longer than a normal shift, additional rest periods may be granted.

Box 8.1: Management comments on avoidable delays: Australian workplaces

'Time is lost when people are getting out of and into machines. For example, someone gets out at 10.20 am and the other doesn't have to go up until 10.30 am.'[14]

'Excuses for lateness include forgetting straddle numbers, and forgetting overalls, missed the bus etc. It often takes half an hour to start a shift.'

'The boys like to take off 10 minutes before the scheduled breaks. This is related to tradition. In the old days, 10 minutes was allocated for washing time. It's hard to get them back on the job five minutes after smoko. Typically, 10 minutes is lost each side of a smoko.'

Source: Detailed discussions

One potential cause of delays in shift starts are operational employees 'failing to report' to work.[15] Employees are not paid for the shift they fail to attend. Employees failing to report to work can result in an unexpected shortage of labour for a particular shift or operation. Often other operational employees must be 'called-up' to replace those failing to attend. Supplementary employees can be engaged to replace permanent employees who fail to attend work. At one Australian workplace management commented:

> The reasons for failing to report are usually if people have had a bad weekend or they have worked the weekend so they take the Monday off. It is an industry problem with the work ethic. If we are short, we will knock off a crane or another piece of equipment, work a double header or bring in supplementaries.

Another form of absence from the workplace occurs when an employee leaves a shift early without permission, known as the 'nick' (chapter 5). This practice has historically been a problem area for Australian workplaces. It is difficult to gather direct evidence on its current extent and frequency. However, detailed discussions suggest that while the 'nick' still occurs its incidence is declining. Increased flexibility in being able to allocate workers to other tasks when primary stevedoring duties are completed appears to be an important factor (chapter 5). Discussions with supervisors suggested that the extent of the 'nick' also depends on the level of control exercised by management.

---

[14] On the other hand, some considered allowing delays as one way of maintaining worker morale, noting that 'being at their necks all the time' is counter productive.

[15] Stevedoring term for a form of absenteeism.

8.3 Minimum payments

Stevedoring operational employees can receive minimum payments for whole (and portions of) shifts not worked, shift extensions,[16] call-ups and idle time payments.

Shift extensions

Operational employees are paid penalty rates equivalent to ninety minutes for a 30 minute extension, while for a two hour extension they are paid penalty rates for three hours of work (chapter 7).

Shift extensions can be a useful rostering mechanism to complete unfinished work. However, the penalty pay rates can also provide an incentive for operational employees to seek extensions to their shifts (chapter 7).[17] Further, to the extent that operational employees value their leisure time less than the payments for shift extensions, they can have an incentive to 'create' extensions to shifts.

The cost of shift extensions can be further increased because of manning scales which require full gangs to be maintained to finish the shift, even if continuous work shifts manning scales are not required (chapter 5). For example, even though lashing duties may have been completed and the straddle drivers are not to be relieved during the extension, down drivers would still be required to form the full gang.

Call-up

Call-up payments are made to operational employees for attending work for the commencement of an allocated shift for which they are then not required.[18] Employees who are subsequently reallocated to the following shift, can earn more than double the shift not worked because of shift premiums and the call-up payment. For example, a grade 4 employee would receive $70 for attending work but not be required for the shift, and then receive around $210 for the

[16] Shift extensions occur when operational employees work up to an additional three hours following the shift just worked.

[17] These incentives are similar for double header overtime. For various operational and rostering reasons there is a higher incidence of double headers than shift extensions.

[18] Minimum call-up payments for this attendance are specified in the Stevedoring Industry Award and workplace agreements. Day shift operational employees reallocated to the evening shift are paid four hours for the day shift. Operational employees allocated to the evening and night shifts are paid the full shift premium.

immediately following evening shift worked (a total of $280 for one shift worked). This can be compared to the employee receiving around $140 if the day shift had been worked. It was not possible to accurately establish how frequently call-up payments occurred.

From the employee's perspective, such payments are reasonable because they reduce the uncertainty of earnings. However, from an employer's perspective, minimum payments when combined with rigid notification and the order of engagement rules, can act as a constraint on the rostering and allocation of labour. Further, call-up payments can adversely impact on costs and hence are an additional budgetary constraint on the use of labour. The payments constrain the ability of the stevedore to adjust labour quantity without, in some cases, incurring a penalty, particularly on weekend shifts where employees must be notified by Friday afternoon (chapter 4).

Idle time

Idle time payments occur when permanent operational employees are rostered on to a shift but are not allocated to undertake the shift and do not attend the workplace. The payment of idle time is one of the features of permanent employment which distinguishes it from supplementary employment.[19]

For example, operational employees might be rostered to work an evening shift, but because of delays at another port a ship might not arrive until the next day shift. Under such circumstances, while operational employees are not actually working, they still receive the base hourly rate for each hour of the idle shift. At some workplaces, operational employees on idle time on the day shift can also be allocated to the evening shift (ahead of permanent employees on double headers, guaranteed wage employees and supplementary employees) on the same day and are paid the ordinary rate for the idle day shift and time and a half for the evening shift.

From the stevedore perspective, idle time is costly. There is a direct loss because of the payment of remuneration when no production is achieved.

At Fergusson Terminal in New Zealand, the rostering and remuneration arrangements appear to have largely eliminated paid idle time. Operational employees are allocated to five of the seven weekdays and all shifts are irregular (chapter 4). Managers have the flexibility to allocate an operational employee

[19] Permanent operational employees are regularly rostered onto shifts and are paid regardless of whether the shift is worked or not. Supplementary employees are not rostered and are not paid for shifts not worked.

over any of the seven days. At some workplaces operational employees are not paid for shifts not worked.

It was not possible to establish how frequently idle time payments occur, but detailed discussions indicated that it tends to be higher at workplaces which experience higher ship call variability. However, detailed discussions at workplaces indicate that, while it still occurs, its incidence has declined. For example, management at one workplace reported that idle time had been reduced to around 3 per cent of labour usage, because the company pursued a policy of bringing employees into the terminal even if they are not required for stevedoring operations. Such employees are allocated to housekeeping or training duties. In discussing the various forms of paid non-working time, management at several Australian workplaces examined suggested that paid idle time payments are no longer a major problem. The improvements in rostering flexibility through irregular shifts and the ability to allocate employees to other duties appear to have been key factors (chapter 4). Detailed discussions revealed some scepticism by Australian management about the potential to eliminate idle time under current work arrangements. For example, management at some workplaces claimed that even if manning levels were different, some idle time would exist under current industrial arrangements because of the inability to control the timing of the arrival of ships.

There may be potential to reduce idle time further. For example, the size of the supplementary pool and the order of engagement can be contributing to idle time. If more supplementary employees were engaged at workplaces, smaller numbers of permanent operational employees would be required to be regularly rostered.

8.4 Summary of findings

Permanent stevedore operational employees have a higher number of formal absences from the workplace than those under other comparable awards. Annual leave and long service leave loadings in the Stevedoring Industry Award are higher than in other selected awards.

- Some permanent operational employees receive five weeks annual leave, yet do not undertake the rostered shift work common to employees in other industries receiving five weeks leave.
- Long service leave accruals are similar in the Stevedoring Long Service Leave Award to other state acts covering employees under selected awards. However, permanent stevedoring operational employees receive a high loading whereas the other employees do not.

- Permanent stevedore operational employees generally receive slightly more public and industry (or union) holidays than employees under other selected awards.

Operational employees taking longer than specified breaks or creating delays to the start of shifts or changeovers are a source of lower performance. Failure to report to work can be an important contributor to delays.

Shift extensions, while preferable to double headers, can lead to paid non-working time. Incentives remain for operational employees to try to extend shifts and, combined with manning rules, can contribute to higher costs.

Call-up payments combined with rigid notification rules can act as a constraint on rostering and the allocation of labour. Idle time continues to be a feature of employment which distinguishes permanent employees from supplementary employees. While the incidence of idle time payments appears to have declined — in part, by increasing the supply of non-permanent labour — they remain effected by the order of engagement rules and restrictions on the number of supplementary employees listed with the workplace.

Operational employees are able to accrue frequent rostered weeks off because of premiums on rostered weekend shifts. Some also receive a loading on their rostered weeks off. In conjunction with the order of engagement and remuneration provisions, these leave provisions can create a need for workplaces to hire additional permanent employees to cover for periods of operational employee's absences (chapter 5 and chapter 7). These additional employees then accrue substantial potential redundancy payments.

Overtime is essentially determined by the order of engagement and encouraged by the relatively high premiums and penalties. This has the practical effect of rewarding time served above higher productivity. Perverse incentives therefore exist whereby lower productivity can be rewarded with the opportunity for accrued leave. Operational employees taking an accrued day of leave may also be creating overtime opportunities for other operational employees.

9 ENABLING CHANGE

There have been some improvements in container stevedoring work arrangements in Australia as a result of enterprise bargaining and the waterfront reform process (1989–92). They have usually been incorporated in enterprise agreements. However, a system of complex, inflexible and prescriptive work arrangements continues to constrain performance.

Responsibility for changing stevedoring work arrangements ultimately rests with managers and employees. The Workplace Relations Act facilitates the development of more flexible work arrangements, but other factors also influence the scope for changes to work arrangements in container stevedoring. They include workplace culture and management ability, union bargaining power and the extent of industry competition.

In this chapter, the effects of work arrangements in container stevedoring on workplace performance (in terms of productivity, timeliness, reliability and labour costs) are summarised. A number of influences that affect the incentives and scope for employers and employees to change work arrangements are then examined.

9.1 Need for change

There have been some improvements in container stevedoring work arrangements in Australia as a result of enterprise bargaining and the waterfront reform process (1989–92). These improvements include the use of some supplementary employees at major ports, decreased manning scales, earnings equalised over longer periods and more efficient use of down drivers. They have usually been incorporated in enterprise agreements. Such changes are likely to have contributed to improvements in container stevedore performance over the period (chapter 2). However, despite some gains, a system of complex, inflexible and prescriptive work arrangements continues to constrain stevedore workplace performance.

It is difficult to isolate and accurately quantify the effects of individual work arrangements on workplace performance. However, this study has assessed the direction of the effects and, in some cases, provided a broad indication of their magnitude. An indicative summary is provided in table 9.1.

The impacts of a number of these work arrangements are mutually reinforcing. An example is the interaction between shift premiums, penalties, the order of engagement and equalisation schemes. Higher shift premiums and penalties provide incentives to work high paying shifts. The order of engagement ensures that any available overtime is allocated to permanent operational employees before supplementary employees. Equalisation schemes ensure that each permanent operational employee within each grade has the same earnings opportunities from overtime.

The combination of these work arrangements has created an 'overtime culture', where permanent employees have the opportunity and the incentive to work longer hours to obtain high levels of overtime payments. Timeliness suffers and labour costs rise. High levels of overtime, as well as irregular hours, can also adversely affect the family and social lives of employees, and their health and safety.

Poor stevedoring performance not only results in higher charges for users such as exporters and importers, but the lack of reliability also gives rise to other costs, including higher production, inventory and finance costs. The potential savings to users through reductions in these indirect costs can be substantial (PC 1998). Unreliability further disadvantages exporters because of the greater risk of supply, resulting in overseas buyers directing their business elsewhere.

Given the adverse effects on performance, why do these unproductive work arrangements persist? Permanent employees clearly benefit from these work arrangements through higher levels of job security and remuneration than would otherwise be the case. The Maritime Union of Australia (MUA) has successfully delivered these favourable conditions of employment to its members.

In understanding why management has accepted these arrangements, despite the adverse implications for performance, a number of characteristics of the negotiating environment in stevedoring are relevant. These include:

- the adversarial relations and mistrust between management and employees, which may contribute to the use of prescriptive agreements;
- union bargaining power, reflecting the MUA's extensive coverage of operational employees and the high costs of industrial disputation; and

Table 9.1: Summary of the key direct[a] effects of individual work arrangements on performance

Stevedoring work arrangement	*Key effects of work arrangements on performance*	*Productivity* [b]	*Labour costs*	*Timeliness and reliability*
Order of engagement	Constrains the use of supplementary employees and the most appropriate use of labour	↓	↑	↓
	Encourages high levels of overtime	↓	↑	↓
Relatively high shift premiums and penalties	Create large price differentials for different shifts	–	↑	–
	Provide incentives to seek overtime	↓	↑	↓
Relatively high redundancy payments	Maintain higher manning levels	↓	↑	–
	Reduce incentives to recruit employees with appropriate skills	↓	?	↓
Prescribed workforce size and composition	Reduces flexibility to alter the size and skill composition of the workforce when demand varies	↓	↑	–
Equalisation schemes	Can decrease ability to allocate appropriate labour to tasks	↓	–	↓
	Can distort incentives to improve performance	↓	–	↓
Existing productivity schemes	Generally outweighed by overtime incentives	↑	?	↑
Aggregate wage schemes	Reduce incentives to undertake overtime	↑	↓	↑
	Can lock in high premiums and penalties	–	↑	–
Relatively high leave and rostered time off provisions	Increase the absence of permanent operational employees from the workplace and increase manning levels	↓	↑	–
Constraints on contracting out	Reduce pressures on permanent employees to be competitive with contractors	↓	↑	↓
Minimum call-up and idle time	Can create extra costs when combined with notification requirements on weekends	–	↑	–

– Little or no effect; ↓ Decrease; ↑ Increase; ? Direction uncertain.

a Direct effects exclude the effects that arise only from interactions with other work arrangements.

b Productivity refers broadly to indicators such as: output divided by employment; and crane rates.

- limitations on competition in the industry, due to a high concentration of ownership, limited interport rivalry and barriers to entry.

The rest of this chapter examines in greater detail the main impediments to change that are internal and external to the workplace, and the role of the *Workplace Relations Act 1996* in facilitating change.

9.2 Workplace-level factors

A key issue is workplace culture and the role of management. As discussed in chapter 3, an adversarial relationship between management and employees pervades most of the Australian container stevedoring workplaces examined. This manifests itself in various ways, including the high levels of industrial disputation and poor occupational health and safety performance. These effects in turn reduce workplace performance.

Workplace culture was not uniformly poor among workplaces however, and there were signs of improvement at most of the workplaces examined. At one workplace — Sea-Land Adelaide — there has been a marked change from the previous adversarial approach at the port. Its workplace culture is now characterised by:

- management communicating directly with employees, as well as via the union;
- management's willingness to share information, including financial information; and
- general awareness of the need to improve performance and to keep costs down.

The improvements at Sea-Land have been influenced by greater competitive pressures from the Port of Melbourne, following the establishment of Patrick's dedicated Melbourne–Adelaide rail link in 1997. They were also facilitated by the relatively small size of Sea-Land's operations. The cultural change at Sea-Land is reflected in Adelaide's improved crane rates performance over the past few years (BTCE 1997b).

It remains the case, however, that management at each of the stevedoring workplaces examined, including Sea-Land, has agreed to prescriptive work arrangements that constrain performance. Prescriptive agreements may provide short-term benefits by reducing uncertainty about the interpretation of rules operating at a particular workplace. This approach may have been influenced by the limited trust between managers and employees. However, by agreeing to such arrangements, management has also reduced its flexibility to improve workplace performance.

It could be argued that stevedoring management has adopted a deliberate strategy of gradual change rather than an 'all or nothing' approach, after weighing the benefits and costs and concluding that the costs of more rapid change are too high. Despite the shift to enterprise employment, operational employees generally still see their primary affiliation as being with the MUA. The scope for change at individual workplaces is also influenced by the broader policies and strategies of the national union.

But management itself has suggested that there have been problems with management performance. Richard Hein, managing director of P&O Ports Australia, noted that this concern has led to P&O Ports investing to improve its management skills:

> Over the past 10 to 15 years, management has a lot to answer for when it comes to productivity issues on the waterfront. The truth is management was not up to the task. (Way 1998)

The detailed discussions revealed that at some workplaces there has been a high turnover of managers in recent years. However, this turnover was seen by some as contributing to difficulties with management and employee relations.

This study was unable to examine management practices in any detail, as they are difficult to observe directly. But, at the very least, management's inability to:

- eradicate the practice of employees leaving the terminal without permission before the end of the shift while still being paid for the full shift;
- improve the relatively poor occupational health and safety outcomes in stevedoring; and
- anticipate the perverse incentive effects of some of the agreed work arrangements

provide support for the view that stevedoring management can do better.

9.3 Industry-level factors

Several container stevedores emphasised that the MUA exercises substantial negotiating power as the *de facto* sole supplier of labour to stevedoring. In particular, stevedores contended that the MUA's bargaining power is a major impediment to changes in work arrangements and improved workplace performance.

There are also some important constraints on competition in container stevedoring which may have reduced the pressure on both employers and employees to change work arrangements and improve workplace performance. These constraints include a high concentration of ownership, considerable barriers to entry and limited interport competition.

Employees' bargaining power

The bargaining power of the MUA is reflected in its almost complete coverage of operational employees in container stevedoring. This blanket coverage continues even though union preference cannot be legally enforced as a result of the Workplace Relations Act.

The bargaining power of the union is heightened by the high costs of delays or stoppages imposed on shipping lines. This places considerable pressure on the stevedore to resolve any disputes quickly. One participant noted that:

> ... the majority of ship owners ... tend to have a very short term approach to the settling of labour disputes. The common catch phrase is ... 'I want you to be firm with the union on this issue, but after my ship has sailed'. ... Often there is a threat made to the stevedoring company that the client will change stevedores if a speedy resolution is not made. (response 1, p. 3)

The cost to a shipping line of delays on the waterfront is approximately $30 000 a day for a ship with a 2000 TEU capacity (BTCE 1995a). Substantial delays have a 'knock-on' effect on the shipping schedule for future ports visited.

Stevedores also incur costs when ships are delayed, because contracts may change hands when they are renegotiated with the shipping line in the longer term. Also, if the contract with the shipping line includes a penalty (or performance) clause, the stevedore may incur penalty charges in the short term, depending on the contract with the shipping line. About half of all contracts between container stevedores and shipping lines contain such clauses. These clauses are generally in contracts with the larger shipping lines.[1]

Participants also noted that the influence of the MUA is further increased by its coverage of other links in the waterfront transport chain, such as tugs and ship crew. Industrial action in any of these links also imposes time-related costs on users, for example shipping lines, exporters and importers. There is some evidence that the introduction of provisions prohibiting secondary boycotts has

[1] An example of a penalty clause is where a stevedore is contracted to handle a minimum number of containers each day. If the stevedore does not meet this minimum because of factors within the control of the stevedore, the rate paid to the stevedore for each container declines by, say, 10 per cent.

reduced the likelihood of the MUA using its coverage of other links in the waterfront chain as a source of undue bargaining power (see section 9.4).

The MUA also has links with international maritime industry unions, and their involvement may further strengthen its bargaining power. An example of this was the recent dispute in Cairns (box 6.1).

Competition in container stevedoring

Limitations on the extent of competition in container stevedoring services can reduce pressure on stevedores and employees (or their union representatives) to change work arrangements to improve workplace performance, to the extent that at least some of the costs of inefficiency can be passed on to users (for example, shipping lines, importers and exporters).

A detailed investigation of the extent of competition is beyond the scope of this study, but the major factors and their effects on work arrangements can be identified.

Factors inhibiting competition in container stevedoring include high concentration of ownership in the industry, limited interport competition and considerable barriers to entry. As outlined in chapter 2, a nationwide duopoly exists at the container operations at the large city ports. The main barrier to entry is port leasing arrangements.

Concentrated ownership

A high concentration of ownership facilitates collusive or 'following' behaviour. However, it does not in itself preclude periods of competitive behaviour in an industry. There have recently been signs of heightened competitive pressures in shipping that may be placing greater competitive pressures on stevedores (PC 1998). It is apparent that contracts of substantial value change hands within ports.

However shipping lines, with whom the contracts are signed, have a limited choice of container stevedores available to them. Also, one of the two stevedores, P&O Ports, has ownership links with shipping lines owned by P&O. The Industry Commission's (1993) inquiry into port authority services noted that several inquiry participants were concerned that these links could reduce interport competition in container stevedoring.

Interport competition

Interport competition is reduced by the large distances between ports in Australia and the relatively high cost of land transport compared with sea freight. But interport competition appears to be greater for stevedores at the smaller ports, such as Adelaide and Brisbane, which can lose contracts to stevedores in Melbourne and Sydney respectively. The scope for competition among the largest ports is further reduced by the dominance of the same two stevedores nationally.

Discussions at Sea-Land Adelaide indicated that management, supervisors and employee representatives were all keenly aware of the competition from Melbourne. The potential consequences of a loss of business exert considerable pressure to improve performance at the workplace. One manager noted that:

> We don't have the monopoly here in Adelaide. A third of South Australian cargo goes through Melbourne. The way to fight it is efficiency and cost effectiveness. We need to make profits to get the investment to increase the size of the pie. Our aim is to build a better service here than in Melbourne.

Geography cannot be altered, but its effect could be reduced if lower cost road and rail (and coastal shipping services) enabled users to switch cargo between ports more easily (Trace 1997). In New Zealand, land distances between ports are considerably shorter than in Australia, but efficiencies gained from land transport reforms also placed greater pressure on the ports to improve performance (appendix I).

Barriers to entry

Equipment costs are high in container stevedoring. Detailed discussions suggested that the cost of a quay crane is approximately $10 million and that each straddle carrier costs about $1–2 million. Peter Cochran, New South Wales Shadow Minister for Transport, noted that start-up costs for a basic container terminal in Australia were approximately $100 million (response 4, p. 4). However, the key issue is the extent to which these investments represent a 'sunk cost' — that is, a cost that could not be recovered if the business failed — thus increasing the costs of entry. Because such equipment can be sold to other stevedores and moved between ports, the high start-up costs in themselves do not constitute a major barrier to entry.

Given the scarcity of good harbour land, the main barrier to entry in stevedoring within each port appears to be the length of wharf leases. Australian wharves are generally owned and leased out by port authorities. In 1992, the then Trade Practices Commission noted that stevedore leases at the major Australian ports

were for periods of between one year and 25 years (TPC 1992). Many leases had renewal rights for between five years and 21 years.

The Trade Practices Commission stated:

> Because waterfront land is a scarce resource, long leases (ie those that exceed the amortisation period of key immovable assets) may impede competition and reduce contestability and efficiency in the stevedoring market. They can entrench existing operators for long periods ... (p. 60)

As recently as 1993, the Port of Melbourne renegotiated its leases for container terminals for periods of more than 20 years.

The Port of Sydney has recently renegotiated the extension of one lease from 25 years to 40 years (table 9.2).

Table 9.2: Length of container terminal leases at the ports of Sydney and Melbourne

Lessee	*Commencement year of lease*	*Length of lease*	*Additional years if option to renew lease is taken up*
Patrick Sydney	1978	40 years[a]	5 years
CTAL Sydney	1979	25 years	5 years
Patrick Melbourne	1993	21 years	21 years
P&O Ports Melbourne	1993	20 years	20 years

a Recently renegotiated and increased from 25 years by the stevedore — on the basis of additional capital expenditure of approximately $100 million in the short term.

Sources: Melbourne Ports Corporation; Sydney Ports Corporation

The Metal Trades Industry Association (MTIA) has also expressed concern about a lack of competition in the Australian stevedoring industry resulting from port leasing arrangements (MTIA 1996).

Barriers to entry are lower in New Zealand than in Australia because, among other factors, common user facilities for container stevedoring are available. At the Ports of Auckland, any stevedore can access a berth with container handling facilities (such as quay cranes) for variable lengths of time. This is likely to have contributed to lower stevedore prices in New Zealand relative to those in Australia. Most of the Ports of Auckland's shares are owned by a statutory body, but they are listed on the New Zealand Stock Exchange and full private ownership of port companies is allowed (box 9.1 and appendix I).

Box 9.1: Effect of competition on New Zealand stevedoring

Broad economic reform in New Zealand included financial market liberalisation, reductions in import barriers and other industry assistance, tax reform and public sector reform. The reforms that had the greatest direct impacts on stevedoring in New Zealand were the transport reforms (commenced in the early 1980s), port reforms (introduced in 1988 and 1990) and substantive labour market reforms (introduced in 1991). The combination of all of these reforms appear to have increased competitive pressures in New Zealand stevedoring.

In New Zealand, several factors have contributed to greater interport competition than in Australia — there are no stevedores operating nationwide; distances between ports are less than in Australia; and transport reform in New Zealand has improved the efficiency of land transport. Competition within ports is also greater because of the availability of common user facilities, whereby a number of stevedores are able to contract with the port company for the use of berths and equipment such as straddle carriers and cranes. Contracts apparently change hands more frequently in New Zealand. The cost of entry is much lower as new entrants with few overheads can undercut existing stevedores. The loss of a major contract continues to force companies out of business. Therefore, the incentive to improve efficiency is great.

Union coverage of the workforce remains high, covering, for example, 70 per cent of the workforce at the Ports of Auckland. However, negotiations at each port take place with the local union branch, not the national body. Local branches are aware that competition from another port may result in the loss of all local stevedoring employment, so the union has more incentive to negotiate change than in many Australian stevedoring workplaces.

Work arrangements vary considerably between workplaces. The proportion of casual relative to permanent employees, for example, varies between 25 per cent and 100 per cent and shift lengths vary between eight hours and 12 hours to shifts of variable lengths. Some stevedores pay flat rates, some contract out maintenance, some pay idle time. Although contracts with employees may be individual or collective, the majority are collective and the union still has considerable influence over employees. Some older employees have found the concept of loyalty to the company difficult to accept. The pay of employees is still relatively high and was in the top 20 per cent of all income earners in New Zealand in 1996.

Source: Appendix I

There is little provision of common user facilities for containers in Australia. Access to berth space is usually provided to private stevedoring companies under exclusive, long-term leases. The stevedores are required to provide their own container handling equipment.

BHP have argued that gains on the waterfront will only occur through new entrants:

> Substantial gains on the waterfront will not be made until new stevedoring providers are able to enter the market in competition with existing operators. We suggest that the performance of port infrastructure could be increased significantly by: implementing more flexible work arrangements in stevedoring; ensuring that port authorities are charged with facilitating trade and promoting competition rather than raising revenue for state governments; facilitating access in the provision of port services. The difficulty of new stevedoring companies in obtaining access to port infrastructure continues to limit competition. (BHP 1996, p. 13)

It is important to recognise however, that the level of throughput in the industry influences the number of stevedores that can efficiently operate at any port. It has been noted that economies of scale are a feature of containerisation (Dick 1992). In particular, the 'thinness' of shipping trades (long, low-volume routes) operating in Australia limits the ability of Australian stevedores to reach the performance levels of large overseas ports such as Singapore (PC 1998).

Economies of scale may mean that Australian and New Zealand container stevedores may not be able to achieve the performance levels of ports with high levels of throughput, but the New Zealand experience suggests that greater competitive pressure does improve workplace performance.

The New Zealand experience also shows that it is possible to have multiple container stevedores with 'thin' traffic and still improve performance. Work arrangements are considerably more flexible in New Zealand than in Australia and are linked to improvements in stevedore performance and greater competitive pressure in the industry (box 9.1 and appendix I).

Contractual arrangements

Market disciplines on container stevedores to change work arrangements are further attenuated by the indirect nature of contractual relationships in sea freight (see also PC 1998). The shipping lines are the only users of stevedore services with a contractual relationship with the stevedore. The interest of the shipping lines is for ships to be loaded and unloaded quickly, because of the high costs of ship delays.

Shipping lines are less concerned about other costs arising from delays in the movement of cargo. Those users affected, such as exporters, importers, road and rail transport companies, have no direct market mechanisms with which to influence container stevedore performance. This limits the pressure on stevedores to improve aspects of stevedore performance that affect those other users.

In 1996, the MTIA surveyed its members about their concerns with the timeliness of stevedore services. It found that companies were dissatisfied with the general level of service. Companies claimed, for example, that there was an excessive gap between cut-off times for containers and the time of ships sailing. Some of the reliability problems on the waterfront could be overcome by improved coordination, but there are few incentives to encourage coordination between the numerous operators (PC 1998).

9.4 Improved legislative framework

The Workplace Relations Act is the major statute in the Australian industrial relations framework which influences how work arrangements are negotiated at each workplace. This is one avenue through which government influences the conditions under which work arrangements may be changed. The Act replaced the *Industrial Relations Act 1988* as the Commonwealth's major piece of industrial relations legislation.

The main objective of the Act (s.3) is to provide a framework for cooperative workplace relations by, among other means, ensuring that the primary responsibility for determining matters affecting the relationship between employers and employees rests with employers and employees at the workplace level.

The Act facilitates change to work arrangements by reducing legislative constraints on workplace negotiations. Award simplification, for example, reduces the coverage of awards to '20 allowable matters' thereby effectively changing the role of awards to that of a safety net.

The enterprise agreements in the workplaces examined were negotiated in 1996, prior to the enactment of the Workplace Relations Act. As changes to enterprise agreements are subject to negotiation between the relevant parties, changes to existing work arrangements may be constrained until the current agreements expire (at the end of 1999 in some cases). However, new entrants to the industry will negotiate agreements under the new Act. Thus, it may be too early to assess the full impact of the new Act on container stevedoring.

However, a number of employer groups considered that further changes to the new industrial relations legislation may be necessary. The Australian Chamber of Manufactures, for example, considered that the Workplace Relations Act provided a basis for stevedores to negotiate reform, but noted that government should consider enabling legislation for ports if changes could not be achieved through this means (response 8).

The National Farmers' Federation also noted that:

> The current industrial relations legislation is in need of further amendments to achieve necessary labour market reform. However, criticisms it has received from the stevedoring industry need to be seen in context. ... It is not enough for the parties to criticise the legislation, but rather they should use the provisions which are available in order to create high wage high productivity workplaces. (response 16, p. 2)

While the Act facilitates change at the workplace, factors such as union bargaining power, management performance and constraints on competition will influence the extent to which work arrangements change in practice.

There are several important parts of Workplace Relations Act, discussed below, that affect the negotiation and organisation of work arrangements:

- the 'no-disadvantage' test;
- award simplification provisions;
- the role of third parties; and
- dispute settlement provisions.

No-disadvantage test

The scope to change existing work arrangements is constrained by the 'no-disadvantage' test in the Workplace Relations Act. The test applies to all types of agreements negotiated under the Act. The no-disadvantage test requires that an agreement does not 'on balance' result in a 'reduction in overall terms and conditions' of employees compared with the 'relevant award' (s.170XA). A possible exception is when a reduction in terms and conditions is not contrary to the public interest, such as to help deal with a short-term crisis in a business (s.170LT). From 1 July 1998, only allowable matters (defined in the Workplace Relations Act) in awards will be considered when the 'no-disadvantage test' is applied.

Several recent decisions made by the Australian Industrial Relations Commission (AIRC) have clarified the application of the 'no-disadvantage test' under the Workplace Relations Act (DWRSB 1997 and 1998). Although the 'no-disadvantage test' ensures overall terms and conditions of employment relative to the award are not reduced, this has not prevented employers 'cashing out' overtime and penalty rates into wages. An example in container stevedoring is the implementation of an 'aggregate wage' at Sea-Land Adelaide.

Award simplification

The Workplace Relations Act specifies 20 allowable matters that can be included in awards made by the AIRC, including classifications of employees, leave arrangements, penalty rates and dispute settlement procedures.

Additional matters may be included if the AIRC considers that they are 'incidental' or 'necessary' for the effective operation of the award (s.89A).

Under award simplification, the AIRC is required to review each award on or after 1 July 1998 unless a review has already taken place (AIRC 1997a). If the *Stevedoring Industry Award 1991* includes nonallowable matters from 1 July 1998, these matters will cease to have effect.

Some provisions in the award, such as for right-of-entry and stop work meetings, appear to fall outside the scope of the allowable award matters. However, several work arrangements that impose major constraints on workplace flexibility, including the order of engagement, equalisation schemes and specification of numbers of supplementary employees, are not in the award.

In December 1997, the AIRC established general principles for award simplification that determine the scope of the allowable matters. Under these principles, a review of the award would, for example, not allow:

- details that would be more appropriately dealt with at the workplace; nor
- prescribed work practices that reduce efficient work performance or are obsolete and need updating, having regard to fairness to employees; nor
- prescribed number or proportion of casual employees, nor their minimum or maximum hours of work.

Also, following the recent decision (AIRC 1997b) on award simplification for the hospitality industry,[2] award simplification would not involve a general review of the level of award entitlements. These levels of award entitlements

[2] The AIRC decision also provided model clauses for personal and parental leave, enterprise flexibility and anti-discrimination.

will not be affected by award simplification because 'paid rates' awards (awards that set out actual terms and conditions) may not be varied and would take into account any subsequent AIRC Full Bench decision on paid rates. The stevedoring industry treats the Stevedoring Industry Award as a paid rates award.

Enterprise agreements use awards as a basis for negotiation, so award simplification may affect the provisions in new agreements. However, nonallowable matters may still be included in a workplace agreement.

Indeed, many of the work arrangements in the existing agreements are not covered by the Stevedoring Industry Award. Because agreement at the workplace is required, the relative bargaining power and approaches of the two negotiating parties will continue to influence the outcome.

Role of third parties

The Workplace Relations Act changed the role of third or external parties in the negotiation of work arrangements. The Act encourages the settling of disputes at the workplace and reduces the role of awards to that of a safety net. The roles of external parties such as the AIRC, Employment Advocate and unions under the Workplace Relations Act are outlined in box 9.2.

In principle, the option for employers to negotiate individual agreements in the form of Australian workplace agreements provides scope for stevedoring management to enter into a more direct relationship with each employee. The MTIA noted that the administrative, procedural and drafting processes required to negotiate and certify such agreements may reduce the likelihood that they will be used (Boland 1997).

The strong preference of the MUA for collective, rather than individual agreements for its members (MUA 1997f) and the MUA's extensive coverage of operational employees in container stevedoring, had led to only collective agreements being negotiated at the workplaces examined. New entrants into the industry may introduce individual agreements and if these agreements incorporate different work arrangements, they could be a source of competitive advantage.

Box 9.2: Role of external parties under the Workplace Relations Act

AIRC

Provisions that limit the role of the AIRC, include:

- the administration of an award system which limits arbitration to allowable award matters and the making of minimum rates awards (s.89);
- the capacity to arbitrate in certain limited circumstances in relation to nonallowable matters (s.89; s.170MX); and
- the administration of workplace agreements limited to certified agreements, with Australian workplace agreements administered by the Employment Advocate (Parts VIB and VID).

Employment Advocate

The Employment Advocate was created under the Act to administer Australian workplace agreements, which are signed individually by each employee. The Employment Advocate also advises and assists employees and employers in relation to their rights and obligations under the Workplace Relations Act, and investigates alleged breaches of the freedom-of-association provisions (s.83BB).

Unions

Several provisions limit the role of unions and aim to encourage greater choice in employee representation, including:

- the freedom-of-association provisions which outlaw preference clauses (which may provide that employees must be members of a particular union to work at a workplace) (s.298A);
- the modification of the 'conveniently belong' rule for registering as an industrial organisation under the Workplace Relations Act to facilitate the establishment of enterprise unions (s.189); and
- the right-of-entry provisions for union officials which limit access to a workplace (s.285).

Dispute settlement provisions

The Workplace Relations Act, and changes to the Trade Practices Act, introduced provisions that allow for a range of sanctions on employees and unions engaging in certain types of industrial action, including:

- *protected industrial action*, which arises when there is no agreement, or the agreement has passed its nominal expiry date. Protected industrial action may only be taken during a bargaining period and must not be taken until after the nominal expiry date of an agreement. Negotiation must precede the industrial action or lockout (ss.170ML, 170MN and 170MP of the Workplace Relations Act); and
- *unprotected industrial action*, which occurs during the operative period of an agreement, or as a secondary boycott — that is, industrial action taken in support of those employed by another employer (McCallum, Pittard and Smith 1990). A party can seek damages that arise from an industrial dispute against another organisation when the AIRC issues a certificate because, for example, it is unable to resolve the matter by conciliation (s.166A of the Workplace Relations Act). Industrial action in support of a workplace taken by workers in other organisations and workplaces has been prohibited under changes to the Trade Practices Act. The party imposing the secondary boycott may be fined up to $750 000 (ss.45D and 45E of the Trade Practices Act).

As shown in box 9.3, stevedoring employers have used several legislative provisions, such as secondary boycott provisions, and this may reduce the number of days lost as a result of industrial disputes.

The secondary boycott provisions are likely to reduce one significant source of the MUA's bargaining power — the impact on stevedores of the action of MUA members employed at other stevedoring workplaces that have the same employer and at other links in the waterfront transport chain, such as tugs and ship crew.

A recent example of the effect of these provisions of the Workplace Relations Act is the order issued by the AIRC (1997c) to prevent Patrick Melbourne employees from taking industrial action for two months over new rostering arrangements. The AIRC ordered employees to cease all industrial action and work in accordance with the award and agreement in force. The decision was later revoked by the AIRC after the MUA voted to endorse work arrangements that they had previously rejected (*Australian Financial Review*, 8 January 1998, p. 6).

These sanctions against employees may not curtail industrial action by international unions where the MUA is able to obtain their support. However, the Australian Consumer and Competition Commission has warned that all boycotts or arrangements that substantially hinder the supply or acquisition of goods or services and are in breach of ss.45D and 45E of the Trade Practices Act, are prohibited (ACCC 1998).

Application of the Workplace Relations Act

Management in the stevedoring industry have used several provisions of the Workplace Relations Act, such as right-of-entry permits, orders to cease industrial action and the boycott proceedings under the Trade Practices Act (box 9.3).

As yet, few changes to work arrangements in container stevedoring have occurred since the introduction of the Workplace Relations Act. However, in December 1997, stevedoring employers (including P&O Ports and Patrick), have applied to the AIRC to simplify the Stevedoring Industry Award and to convert the award from a paid rates award to a minimum rates award (DWRSB 1998).

The AIRC's formal order on award simplification for the hospitality industry that deals with penalty rates may have implications for the simplification of the Stevedoring Industry Award. The application to reduce certain penalty rates in this decision (AIRC 1998) was dismissed because the penalty rates did not 'prescribe work practices or procedures' for the purposes of the Workplace Relations Act.

The AIRC also considered that there was insufficient evidence to support claims that current penalty rates reduced productivity and that reductions in penalty rates would increase employment in the hospitality industry.

Box 9.3: Use of the Workplace Relations Act

Provisions of the Workplace Relations Act that have been used by stevedoring and other industries include the following:

Unprotected industrial action — orders to cease industrial action (s.127)

By 31 December 1997, the Department of Workplace Relations and Small Business was aware of 267 applications under s.127. Most of these were withdrawn, adjourned or settled, mainly because the union agreed to return to work without the AIRC needing to issue orders. Final s.127 orders were issued in 28 cases.

Unprotected industrial action — certificates allowing actions in tort (s.166A)

The provision allows damages to be brought against a party over conduct that arises from an industrial dispute. By the end of December 1997, eight certificates under s.166A were made by the AIRC out of a total of 36 applications. In the other 28 matters, the AIRC did not issue a certificate. Of the eight certificates, four actions in tort have been initiated. Five more certificates were granted after December 1997. One of these five certificates was issued by the AIRC to Patrick on 9 February 1998. This allowed Patrick to pursue the MUA for damages before the Supreme Court of Victoria as a result of the continuing dispute at Webb Dock. The Court granted Patrick Stevedores an interim injunction on 23 February, requiring the MUA to cease industrial action.

Unprotected industrial action — secondary boycott proceedings

By 31 December 1997, nine applications under s.45D or s.45DB of the Trade Practices Act had been made. In one case, the applicant applied for damages, alleging that the MUA was frustrating attempts to load coal at Port Waratah.

Number of Australian workplace agreements approved

The Employment Advocate approved 4676 Australian workplace agreements (covering 237 employers) between 12 March 1997 and 31 January 1998. None of these cover stevedoring operational employees.

Right-of-entry permits

Permits may be issued to unions to allow a union official to enter a workplace. One stevedore applied to the AIRC to remove the permit of one official because his behaviour was considered disruptive.

Prosecutions under freedom-of-association provisions

The Office of Employment Advocate received 188 freedom-of -association complaints between 1 March and 31 December 1997. Most of these were finalised without the need for legal action.

Sources: DWRSB (1998 and 1997); detailed discussions

9.5 Summary of findings

There have been some improvements in container stevedoring work arrangements in Australia as a result of enterprise bargaining and the waterfront reform process. These improvements include the use of some supplementary employees at major ports, decreased manning scales, earnings equalised over longer periods and more efficient use of down drivers.

A number of arrangements, as they presently operate, continue to adversely affect workplace performance, including:

- the order of engagement;
- relatively high shift premiums and penalties;
- relatively high redundancy provisions;
- prescribed workforce size and composition;
- equalisation schemes;
- some aspects of existing productivity schemes;
- some aspects of aggregate wage schemes;
- relatively high leave and rostered time off provisions;
- constraints on contracting out; and
- minimum call-up and idle time provisions.

These work arrangements form a complex, inflexible and prescriptive system that continues to constrain container stevedore workplace performance. Many of them (such as the order of engagement, shift premiums and penalty rates, and equalisation schemes) are mutually reinforcing. They create incentives for permanent employees to work longer hours to obtain high levels of overtime payments (which can affect the health and safety of employees). They also constrain the opportunities for management to alter the size and composition of the workforce. The outcome is lower levels of productivity, reduced timeliness and reliability, and higher labour costs.

The scope to change work arrangements is subject to three main sets of influences:

- *workplace-level factors*, including an adversarial workplace culture and the attitudes and abilities of managers and union representatives;
- *industry-level factors*, including the limitations on industry competition and significant union bargaining power. These factors can reduce the pressure on stevedores and employees to change to the extent that at least some of the costs of inefficiency can be passed on to users of stevedore services; and

- *the legislative and regulatory framework*, particularly industrial relations legislation.

The Workplace Relations Act facilitates change by enabling work arrangements to be determined primarily at the workplace and by reducing legislative constraints on negotiations. Together with the secondary boycott provisions of the Trade Practices Act, it has also reduced some sources of union bargaining power. Ultimately, responsibility for better outcomes rests with managers and their employees. Greater competition in container stevedoring would increase the pressures on both sides to change work arrangements and improve performance.

A PARTICIPATION AND VISITS

The Productivity Commission received 17 responses to the Research Issues Brief from a variety of individuals and organisations. These participants are listed in section A.1. During the course of the report, discussions were held with individuals and organisations in Australia and New Zealand (section A.2).

A.1 Responses to Research Issues Brief

Participants	*Response number*
Australian Association of Ports and Maritime Authorities	12
Australian Chamber of Manufactures	8
Australian Peak Shippers Association	6
Bunbury Port Authority	5
Cattle Council of Australia	3
Globex International Pty Ltd	15
Institute of Transport Studies	10
Ken Freeman	1
Liner Shipping Services Ltd	7
Metal Trades Industry Association	9
National Farmers' Federation	16
Newcastle Port Corporation	13
Peter Cochran, Shadow Minister for Ports, New South Wales	4
Port of Brisbane	14
Ports Corporation Queensland	2
Office of Marine Administration, New South Wales	17
Ministry of the Premier and Cabinet, Western Australia	11

A.2 Visits

Australia

Association of Australian Ports and Marine Authorities
Australian Maritime Officers Union

Bureau of Transport and Communications Economics

Department of Primary Industry and Energy (Commonwealth)

Department of Transport and Industry Development (Commonwealth)

Department of the Treasury (Commonwealth)

Department of Workplace Relations and Small Business (Commonwealth) (formerly Department of Industrial Relations)

Maritime Union of Australia

National Farmers' Federation

National Key Centre in Industrial Relations, Monash University

New South Wales Minister for Ports

P&O Ports Head Office

P&O Ports Melbourne

Container Terminals Australia Ltd

Patrick The Australian Stevedore Brisbane

Patrick The Australian Stevedore Head Office

Patrick The Australian Stevedore Melbourne

Sea-Land (Australia) Terminals Pty Ltd

Strang Australia

Sydney Ports Corporation

New Zealand

Department of Labour

Leonard and Dingley

New Zealand Aluminium Smelters Ltd

New Zealand Employers Federation

New Zealand Waterfront Workers Union

Port of Wellington

Ports of Auckland

Unilever

Wellington Stevedoring Services

B RESEARCH METHOD

The approach followed in this study for examining work arrangements in Australian stevedoring workplaces is described. The data collection methods are outlined, and the selection of work arrangements and workplaces is discussed.

B.1 Scope

There have been numerous studies on stevedoring since world war II. Previous inquiries generally focused on industry-wide arrangements. The Industry Task Force on Shore-Based Shipping Costs (1986), for example, examined industry labour allocation systems and awards. The Inter-State Commission (ISC 1989b) also examined industry arrangements, and recommended the introduction of enterprise-level arrangements. Under subsequent reforms in the early 1990s, the stevedoring industry adopted enterprise bargaining (appendix F). This provides a strong rationale for shifting the focus of research on work arrangements to the workplace level.

Unlike previous research, this study examines a range of work arrangements in selected stevedoring workplaces. The advantage of this approach is that it can reveal important insights into:

- the nature and extent of work arrangements and how they vary across workplaces;
- interrelationships between work arrangements (for example, how rostering arrangements affect manning levels);
- links between work arrangements and workplace performance (for example, how pay systems influence incentives and productivity); and
- internal factors (such as workplace culture) and external factors (such as the industry structure and industrial relations framework) which may be inhibiting changes in work arrangements.

B.2 Data collection

Such an approach necessarily requires detailed information obtained at the workplace level. A number of methods have been used to collect qualitative and quantitative data from primary sources including:

- initial consultations with industry participants;

- a public call for views and evidence;
- detailed discussions at selected workplaces; and
- workplace information requests.

These data collection methods are outlined below. Primary data were supplemented by secondary information sources.

Consultations

In the initial phase of the project, consultations were undertaken with industry participants: stevedoring employers, maritime unions (the Maritime Union of Australia (MUA) and the Australian Maritime Officers Union) and other parties including government departments and specialist academics. This input assisted in:

- defining the scope of the study and the likely set of issues; and
- selecting the work arrangements and workplaces for analysis.

An important issue raised in consultations was the appropriate points of reference for comparing work arrangements. In this study, work arrangements are compared:

- over time within workplaces;
- across different workplaces in the Australian container stevedoring industry;
- with arrangements in other Australian industries (for example, the transport industry) where considered appropriate; and
- with stevedoring workplaces in New Zealand.

Public call for information

Following the consultations, a public brief, the Research Issues Brief, was prepared and distributed widely to interested parties. The Research Issues Brief outlined the background to the study, the broad work arrangements under consideration, and the main issues. It provided parties upstream and downstream of stevedoring activities with an opportunity to express their views and to contribute to this study (appendix A).

Views and evidence (such as examples of the effect of particular work arrangements on workplace performance) were sought from stevedoring companies, stevedore employees and maritime unions, shipping lines, exporters

and importers, and other operators and agencies involved in, or affected by, waterfront activities.

Detailed discussions

Qualitative information on work arrangements and performance was obtained from discussions at selected workplaces. In-depth discussions were held at selected Australian workplaces in four capital city ports (section B.4). Meetings were held separately with management, supervisors and Site Committees (comprised of elected union representatives at the workplaces).

Participants were asked for their views on the advantages and disadvantages of work arrangements in the industry. Information was also sought on the effects of work arrangements, such as shiftwork, on employees' family and social lives. Participants were asked for their views on better ways of organising work and impediments to possible improvements.

A possible drawback of the information collected through these discussions is the potential for selection bias. Management and unions ultimately decided which supervisors and employees were made available for the detailed discussions. In the case of supervisors, the majority of those available at the time participated in the discussions. Employees were represented by Site Committee members nominated by the MUA. As with all surveys and interviews, there is also the potential for participants to place undue weight on certain issues for strategic reasons. Given the potential for bias, other information was used wherever possible for validation.

The main benefits of the semi-structured approach followed in the discussions is that it provided a capacity to:

- set the broad parameters of the discussion with the flexibility to further explore issues where required;
- seek elaboration and clarification of points; and
- obtain first-hand information from participants with a detailed knowledge and experience of stevedoring activities.

In addition, discussions with people in different groups within an organisation offered insights into how these groups interact (including the extent of communication between them) and the state of workplace relations, attitudes and culture. Other researchers (for example, Ichniowski and Shaw 1995; Womack, Jones and Roos 1990) acknowledged the value of having access to managers and workers for plant and firm-level studies.

Workplace information requests

Information was requested from the five selected Australian workplaces, as well as Fergusson Terminal, Ports of Auckland, New Zealand. This included data on labour productivity, throughput and equipment. Specific information was also requested on the selected work arrangements.

The initial information requests varied between workplaces according to the information available from other sources, such as enterprise agreements.

Secondary sources

Primary data were supplemented by information drawn from a range of secondary sources, including:

- the *Stevedoring Industry Award 1991*, enterprise agreements and industry-specific and general industrial relations legislation;
- the awards of four other industries: the *Transport Workers Award 1983*, the *Storage Services — General — Interim Award 1996*, the *Metal Industry Award 1984* and the *National Building and Construction Industry Award 1990*;
- Australian Bureau of Statistics data;
- previous industry-specific literature, including government inquiries pertaining to work arrangements; and
- labour economics, industrial relations and human resource management literature.

Key features of the Stevedoring Industry Award and enterprise agreements of the selected workplaces are summarised in appendix J. Detailed examination of clauses in these enterprise agreements provided a basis for assessing the extent to which workplace practice diverges from formal arrangements, and the extent to which formal arrangements vary across workplaces.

B.3 Selection of work arrangements

The criterion guiding the selection of work arrangements was to include those arrangements that are reputed to have a significant influence on workplace performance in the stevedoring industry and are of general concern to discussion participants and respondents.

The selection process was iterative. Work arrangements were initially selected on the basis of preliminary consultations and a detailed analysis of the

Stevedoring Industry Award, enterprise agreements and other secondary sources. The Research Issues Brief provided interested parties with the opportunity to comment on the work arrangements selected at that stage. The list of specific work arrangements was finalised following the detailed discussions (table B.1).

Table B.1: Work arrangements selected for analysis

Broad arrangement	*Specific arrangement*
Rostering	Order of engagement Equalisation schemes Notification Rostered time off Shift types Shift length
Manning	Gang sizes Continuous work shifts Manning scales Manning levels
Recruitment, redundancy and contracting	Preference clause Selection process Redundancy provisions Contracting
Remuneration	Base plus pay systems Shift premiums Penalty rates Productivity schemes Aggregate wage systems Hours worked and wage levels
Paid non-working time	Shift breaks and delays Shift extensions Call-up payments Idle time Leave arrangements

Nearly all of the work arrangements[1] selected are specified in enterprise agreements or in the Stevedoring Industry Award. Enterprise agreements include clauses relating to manning scales and the order of engagement, for example. However, some work arrangements, such as equalisation schemes,

[1] The term 'work arrangements', as defined in chapter 1, is used in this report rather than 'work practices'. In the consultation phase of this study, industry participants indicated that the term 'work practices' suggested an emphasis on informal practices, such as longer than scheduled breaks.

have evolved through 'custom and practice'. The selected work arrangements are discussed in more detail in chapters 4–8.

B.4 Selection of workplaces

The focus in this study is on container operations, particularly the core functions of stevedores — the loading and unloading of ships and the loading and unloading of freight of land transport operators servicing the wharf (receival and delivery).

Workplaces selected for comparison were:

- Sea-Land (Port Adelaide);
- CTAL (Port Botany, Sydney)[2];
- P&O Ports (Port Melbourne);
- Patrick (Port Melbourne);
- Patrick (Fisherman Islands, Brisbane); and
- Fergusson Terminal (Ports of Auckland, New Zealand).

The Australian terminals selected account for around three quarters of the annual throughput handled at major container terminals in Australia. In selecting workplaces, consideration was given to:

- having scope to document alternative work arrangements;
- including larger as well as smaller stevedoring operations; and
- being able to compare the same stevedoring company in different ports and different stevedoring operations in the same port.

Where information was given on a 'commercial in confidence' basis, workplaces and employees have not been identified.

Regional ports, which generally undertake few container operations, were not visited. However, telephone discussions were held with representatives of several regional stevedoring facilities as part of the initial phase of research.

Consultations and written responses suggested that useful insights could be gained by contrasting Australian work arrangements with a comparable overseas port. For instance, the Association of Australian Ports and Marine Authorities suggested that:

[2] P&O Ports has a major shareholding in the CTAL terminal and operates the terminal as part of its national terminal operations.

> ... the study should make some attempt to compare work practices in relation to Australian container operations with those in other comparable ports, for example, Auckland, Singapore, some European ports say Antwerp and Hamburg and say Los Angeles or other North American ports. (response 12, p. 2)

Fergusson Terminal in Auckland, New Zealand, was selected as an appropriate international comparison. There were a number of reasons for this choice.

- First, New Zealand and Australia are countries with broadly similar cultures and living standards.
- Second, the annual throughput of Fergusson Terminal falls within the range of containers handled by the Australian workplaces selected (table 1.2). Choosing an overseas terminal with a throughput similar to that of Australian terminals is a means of controlling for scale effects.
- Third, extensive reforms have been undertaken in the New Zealand waterfront, transport sector and labour market in the past decade. These reforms led to significant increases in productivity and lower costs in the New Zealand stevedoring industry (see appendix I for further detail on these reforms and their impacts).
- Finally, work arrangements at New Zealand terminals, in many cases, differ substantially from work arrangements at Australian terminals. Consultations indicated that variations in work arrangements between Australian and New Zealand container terminals were likely to be much greater than variations across Australian terminals.

Discussions were held with a number of New Zealand stevedores (including the Ports of Auckland), users of the waterfront, the Waterfront Workers' Union and the Department of Labour (appendix A). Follow-up discussions were held with the management of the Ports of Auckland to obtain further information on work arrangements.

C LABOUR TASKS AND THE CONTAINER STEVEDORING PROCESS

The container stevedoring process requires the use of specialist machinery and infrastructure. Labour performs a range of duties, including operating machinery and undertaking manual tasks. Stevedoring employees are generally organised into different operational areas according to the tasks that they perform. Classifications based on skills identified in the *Stevedoring Industry Award 1991* form the basis of career paths in most workplaces examined.

C.1 Container stevedoring process

Container stevedoring is a mechanised process which involves the use of specialised equipment, such as cranes and container transport vehicles, in terminals dedicated to handling containers.[1] Other infrastructure includes yard space for short-term storage and computer systems for planning and processing the movement of containers through the terminal (figure C.1).

Despite the mechanisation of the lifting and moving tasks, there are still manual tasks which must be performed.

There are two main techniques used to load and unload containers from ships. Those ships that specialise in the transport of containers rely on shore-based cranes (quay cranes) to lift containers on and off; this process is used to move the majority of containers arriving at capital city ports. The second technique relates to roll on, roll off (ro-ro) ships. These are loaded and unloaded by forklifts driving aboard the ship using a ramp. Generally, ro-ro ships do not specialise in the transportation of containers and they carry other types of break bulk cargoes.

Several different methods and types of equipment are used in Australia's major container terminals. The choice is partly related to characteristics of operations such as yard area and throughput. Regardless of the types of equipment used at a particular terminal, a container moves through a similar series of stages in loading and unloading operations (figure C.2).

[1] Some Australian terminals — for example, Patrick Brisbane — also handle break bulk cargo.

Figure C.1: Typical container terminal layout

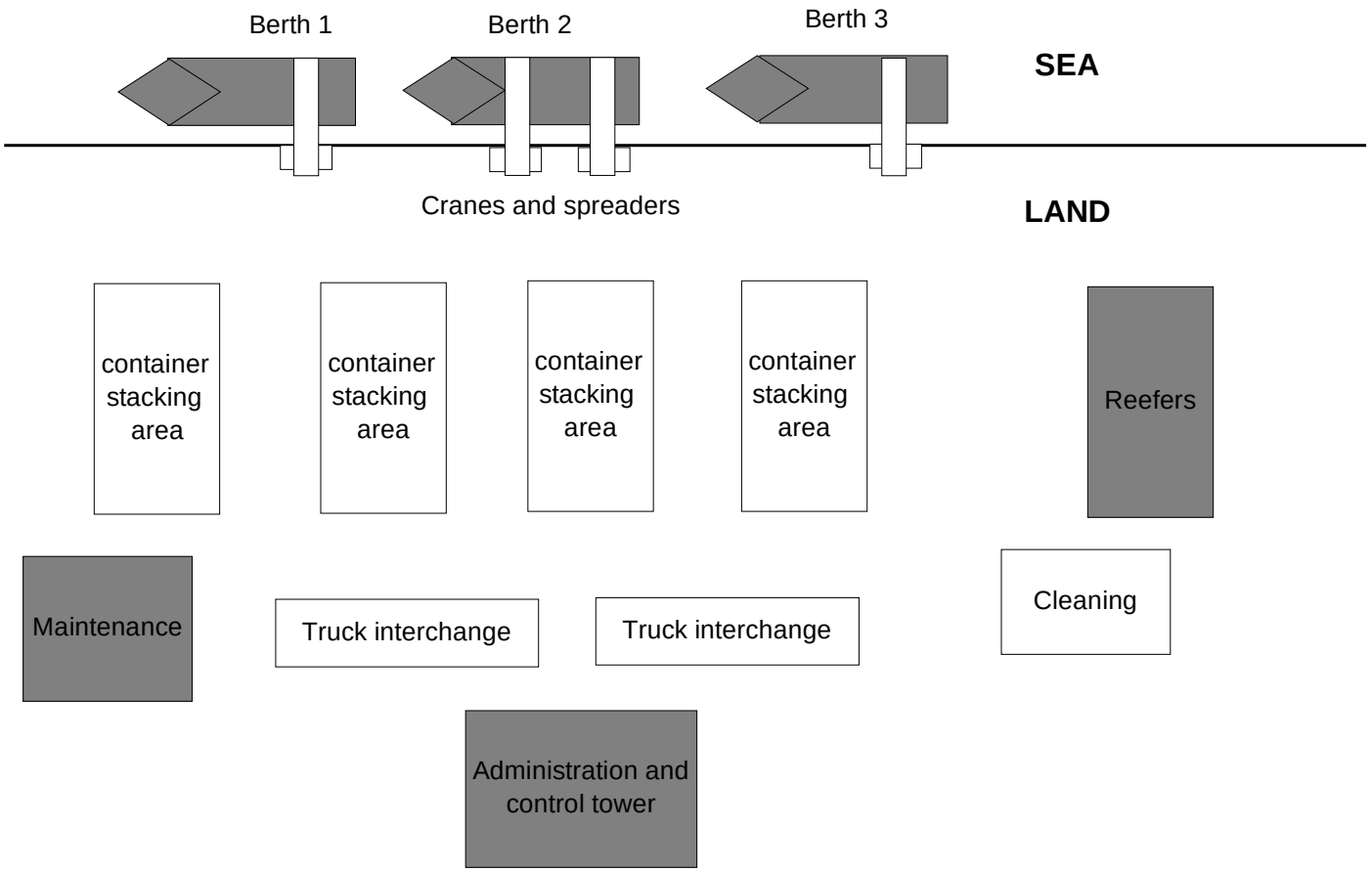
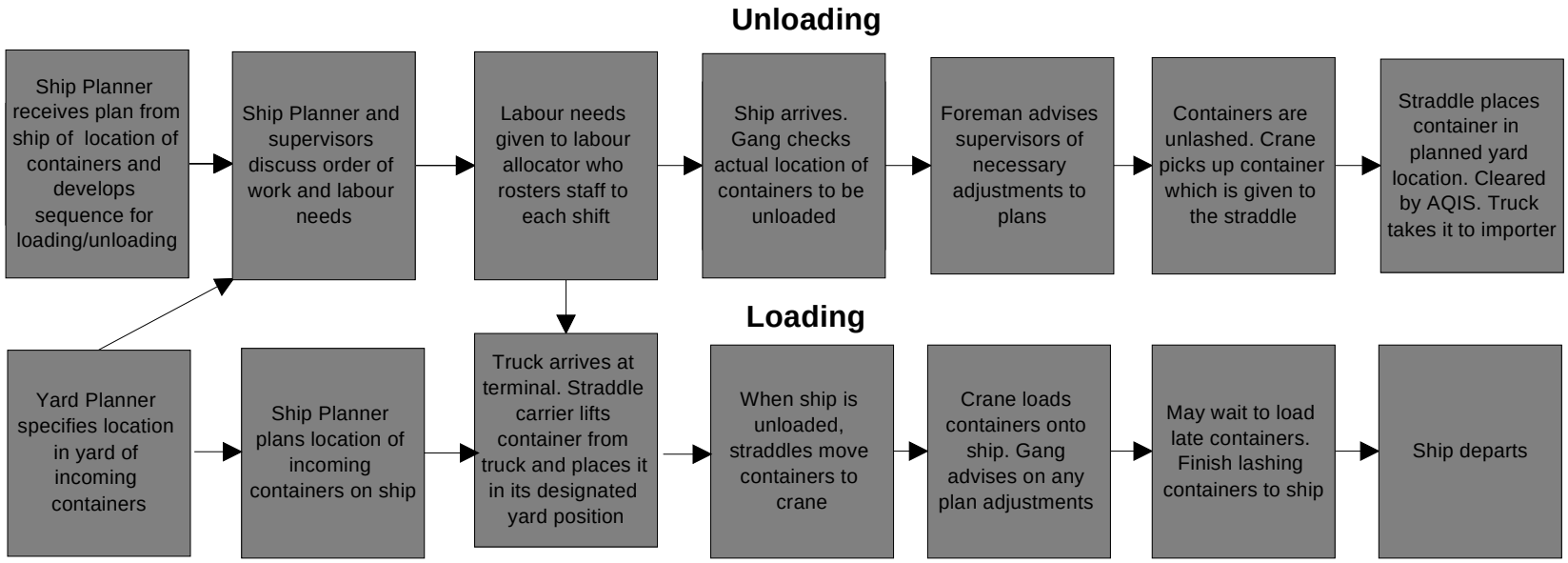

Berth 1
Berth 2
Berth 3
SEA
Cranes and spreaders
LAND
container stacking area
container stacking area
container stacking area
container stacking area
Reefers
Maintenance
Truck interchange
Truck interchange
Cleaning
Administration and control tower

Figure C.2: Simplified explanation of how container ships are unloaded and loaded, including receival and delivery



A container is generally handled separately on at least two occasions between land and sea transport. For outgoing cargo, the first stage involves a lift between road or rail transport and stacks (rows of containers) in the yard. Containers are generally stored two or three high in the yard on a short-term basis before being transferred to a ship. Depending on the terminal, several types of equipment including straddle carriers, gantry cranes and internal transfer vehicles (including truck and trailer) are used in this stage. Forklifts are generally not used in terminals to move containers to or from the stack. Planning systems are designed to minimise the restacking of cargo, but containers may be shifted between stacks before being moved to the quay crane.

Similar equipment is involved in the next stage of moving containers between the stack and the quay crane located next to a ship. The quay crane then lifts the container into a designated place on the ship. Computerised planning systems seek to minimise the number of lifts per container from when it is loaded onto a ship and unloaded at its final destination. Nevertheless, where a ship carries containers bound for several destinations, a container may be lifted several times if it is necessary to access containers below those stacked on top at the same port, or at other ports *en route* to the container's final destination.

The process for incoming containers is reversed. As noted in box 2.1, some types of containers require different handling techniques. There are special requirements, for example, for some hazardous cargo (such as chemicals) which affect the stowage of containers aboard the ship and within the yard.

The introduction of new technology, particularly containerisation and computerisation, has required considerable investment in new equipment and processes. Productivity enhancing technology has led to changes in the way work is organised and to significant reductions in labour requirements. The introduction of computer-assisted planning for ship loading and unloading, for example, has changed the role of some employees and has reduced the number of clerical employees required to process and produce ship working plans.

In recent years, the two major operators, P&O Ports and Patrick, have made significant investments in their container terminal operations. Investment by these two operators has totalled well over $600 million over the past five years. The investments partly reflect the development of more reliable and faster equipment and the consolidation of terminals following the Waterfront Industry Reform Authority reforms.

C.2 Labour tasks and responsibilities

In a container terminal, employees are organised to carry out several functions associated with the movement of containers between the ship and land transport. The separation of management, planning, supervisory and operational functions varies among terminals. This section provides a general outline of the duties and tasks performed in each functional area.

Terminal and operations managers

There is usually one terminal manager who is responsible for the smooth running of the container terminal, overseeing its planning and operational functions. The operations managers are responsible for the logistical aspects of the terminal and work with the ship planners. There is usually a separate operations manager for the ships and the yard.

Ship and yard planners

The ship planner receives information from the ship about the placement of containers on incoming ships that need to be unloaded. The yard planner receives information from the truck booking system as to which containers are being delivered or picked up by trucks or rail.

Information about which containers are to be loaded onto incoming ships is provided to the ship planner who determines where the containers arriving by land transport are best loaded onto the ship, based on several factors including the contents and weight of each container. The yard planner determines where containers arriving by truck and from the ships should be placed in the yard. The location of containers in the yard is planned to minimise the number of times they have to be moved and the distance to the quay crane.

Clerks work with the planners and inform operational employees as to where containers are to be moved by straddles and cranes. When supervisors or foremen encounter unexpected problems, such as containers not being where they should be, or ships listing, information is transferred back to the planners to adjust the order of work.

Supervisors

A supervisor has overall responsibility for the working of a ship, which may require the working of several shifts to complete the exchange. Consulting with

the operations manager and other supervisors, the supervisor is responsible for the working of a ship and decides:

- how to deploy physical capital (including the berth, number of cranes and other equipment, and area of the yard); and
- how much labour is required for the loading and unloading operations.

The supervisor also coordinates the receival and delivery of cargo for the ship. A shipment of containers arriving at the terminal by rail, for example, may require extra labour and equipment to be engaged for receival and delivery operations for a shift.

Once labour requirements have been determined and employees have been allocated to each shift, the supervisor can determine which employees undertake each task. Supervisors are often required to make on-the-job decisions when faced with late receivals, equipment breakdowns and poor or incorrect ship presentation. After the working of a ship is completed, the supervisor reports to management on the whole cycle of operations.

Operational employees

Operational employees[2] perform a range of roles and tasks including clerical duties, maintenance and machinery operation.

Foremen

Foremen work in consultation with supervisors and are responsible for coordinating and monitoring the work of other operational employees in the working of ships and in receival and delivery operations. Foremen may have some discretion as to how work is performed in some aspects of the operation, including the allocation of employees to machinery and other duties.

Foremen may work on the wharf or ship with other operational employees to direct cranes and yard equipment, supervise lashing gangs and check containers against sequencing sheets. An operational employee with some training as a foreman may be upgraded to carry out these duties for the duration of a shift.

Clerks

Several clerical functions in container stevedoring have been computerised. Nevertheless, clerical employees continue to perform tasks associated with tracking the movement of containers into, within and out of the terminal. Some

[2] Defined as all employees below the level of supervisor.

clerks may be involved in directing equipment and checking yard operations against sequencing sheets. Clerks are also involved in processing receival and delivery documentation from transport operators. Additional tasks, such as the allocation of labour and payroll functions, are also performed by clerical employees. At certain terminals, some employees have been trained to work in other operational areas.

Machinery operators/general duties

The operation of heavy machinery (such as quay cranes and straddle carriers — see below) and other general duties/manual tasks are performed by operational employees. The tasks may be undertaken for the whole shift or, in the case of heavy equipment (such as quay cranes and straddle carriers), drivers may perform other tasks during their 'down periods'. Some examples of manual tasks that employees may perform include:

- ship work — unfastening lids which cover onboard ship bays, lashing/unlashing (which involves lifting heavy 12 foot steel rods to lock in containers on ships — see below), placing/removing cones and twistlocks which are used to lock in containers, and locating containers;
- yard work — plugging/unplugging and monitoring refrigerated containers and locating containers; and
- ancillary operations — cleaning containers, machinery and amenities, linemarking and refuelling machinery.

The conditions under which manual tasks are performed vary from day to day and may affect the sequencing and speed of loading and unloading operations. Some of these factors include damaged cell guides on ships (which may make container stowage difficult), poor lashing equipment, damaged containers and inclement weather.

Driving quay cranes

Up to three shore-based quay cranes are used to load and/or unload containers from a ship. They are the most expensive heavy machinery operating on site, with a new crane costing approximately $10 million. Depending on the type of crane, they can lift weights of 20–40 tonnes to a height of approximately 45 metres.

The driver catches an elevator to the control cabin near the top of the crane, some 32 metres above the ground. An ability to work at heights is therefore an essential criteria for the development of a proficient crane driver. Several discussion participants noted that it is not uncommon for operational employees

to trial crane driving but decide against further training because they have difficulty coping with the height.

Competent crane driving also requires excellent hand–eye coordination, good eyesight and an ability to concentrate.

Once in the cabin, the crane driver operates the machine from a sitting position, looking around and down through glass walls and glass floor panels. A visual display unit provides the driver with specific directions from the planner on which containers to unload from the ship, or conversely, on where to place a container being loaded on board.

To unload a container from a ship's deck or hold, the driver must adjust the spreader (which is attached to the boom by wire ropes) to the correct container length of 20 or 40 feet. The driver then lowers the spreader and moves it over the top of the container to be lifted. The spreader is then accurately aligned with the four corners of the container and lowered into position so the corners of the spreader lock into the corners of the container. The container is then raised, moved from ship deck or hold to shore, and lowered onto the pavement and released for the straddle carrier to pick up, or placed onto a truck and trailer. The reverse process occurs to lift a container onto a ship.

Due to the height of the driver relative to the spreader when nearer ground level an inexperienced driver can take significantly longer to move a container than a skilled driver who has the expertise to minimise the sway of the wire ropes and minimise the number of attempts to lock the spreader onto the container. Inclement weather, such as strong winds and rain, exacerbates the difficulties.

Discussion participants noted that although drivers work in air-conditioned cabins with good visibility and ergonomic seats (in the newer cranes), the nature of the task — the constant looking down — may cause back, neck and eye strain injuries.

Driving straddle carriers

Workplaces which operate straddle carriers[3] often have 20 or more in use at a time, with each new machine costing about $1–2 million. Driving a straddle carrier requires a similar aptitude and skills to those needed for crane driving,

[3] Four out of the five workplaces examined use straddle carriers to move containers around the yard. However, CTAL Sydney uses rubber-tyred gantries (which are similar to straddle carriers but move along fixed tracks) and internal transfer vehicles (that is, truck and trailer). Driving skills required for rubber-tyred gantries are similar to those for straddle carriers.

because its purpose is similar — to pick up and deposit containers. Straddle carriers, unlike cranes, move containers around the yard and on and off trucks.

Although substantially lower than a crane, straddle carriers are nonetheless tall (and narrow) to enable them to move along rows of containers stacked two or three high in the yard. As with crane driving, the straddle driver sits in a cabin high above the ground (about 10 metres), receives instructions via computer in a similar manner, and picks up and deposits containers in a similar manner.

The manoeuvrability of straddle carriers, relative to cranes, brings its own set of potential problems. The design of a straddle carrier (tall and narrow) is inherently unstable. Drivers must take care to keep the centre of gravity low by carrying containers as low as possible. Cornering must also be undertaken with care to ensure the vehicle does not tip over: the cabin computer screen provides information on the lean of the vehicle while cornering. Visibility from the cabins is generally good but there are blind spots. Drivers therefore need to watch out for other vehicles and people on foot when manoeuvring the straddle carriers around the yard. The skill of an experienced driver is also needed for manoeuvring straddle carriers over stacks of containers which have little space between the rows so neither the machine or the containers are damaged.

Lashing

Lashing is a manual task which requires a greater degree of physical strength than is needed for operating heavy equipment. Lashing duties involve handling heavy 12-foot rods which lock containers onto the ship's deck. These rods are designed to prevent containers from dislodging while the ship is at sea. In the past, unlashed containers have toppled over (damaging their contents) or have been lost overboard in rough sea conditions.

The lashing gang begins its duties after a ship berths at the terminal. The gang walks up the gangway or is hoisted onto the ship in a lashing cage by the quay crane. Gang members move about the ship's deck and holds to unfasten and remove the steel rods on the containers that are to be lifted. Once the exchange is completed, the lashing gang reboards the ship to fasten steel rods onto the new load of containers. The gang then returns to shore.

Shipboard conditions can increase the difficulty of the lashing task and also affect safety (box 2.4). Given its physically demanding nature, lashing is considered the least popular task in ship working operations.

Maintenance

Maintenance employees usually comprise formally accredited mechanics and electricians who carry out maintenance on stevedoring equipment. Generally, maintenance employees undertake the full range of maintenance functions including preventative maintenance, periodic servicing, major repairs and refurbishment. Maintenance is normally undertaken in workshops located within terminal grounds. However, maintenance employees are often called to repair or service machinery anywhere within the terminal as required.

Some maintenance work is performed by contractors (chapter 6). For example, maintenance work on machinery can be outsourced. In some terminals, maintenance employees may also be available to work in other operational areas for which they are trained.

C.3 Labour classifications

Classifications based on skill levels set out in the Stevedoring Industry Award are reflected in enterprise agreements in most stevedoring workplaces, and they incorporate the tasks performed by employees in different functional areas (table C.1).

Employees are graded at the level for which they have the necessary skills. Skills are generally acquired or developed by employees through structured training programs run by the employer at each workplace. Employees may be regraded to a higher level when they are able to demonstrate the skills required at that level.

The skill grade does not strictly determine the types of tasks that an employee performs or the on-the-job seniority of employees.

However, those aspects of the operation requiring a higher level of skills (such as driving quay cranes) are generally undertaken by employees at the skill level of 4 or above. Other heavy equipment, such as straddle carriers, are generally operated by employees graded 3 or higher. At Patrick Melbourne, for example, straddle carriers are operated by employees at skill level 3, 4 or 5. Manual tasks, such as lashing, may be performed by employees at all skill levels.

Most new employees are trained in all functions and tasks in a grade. Recently recruited guaranteed wage employees and supplementary employees are graded at skill level 2 following initial introductory training. These employees will have the opportunity to be graded at a higher level with further training and on-the-job experience.

Table C.1: Stevedoring award employee classification levels

	Skills used in each classification level			
Level	*Clerical*	*Operational*	*Other*	*Maintenance*
1	Induction and initial training			
2	Small equipment use, ship and wharf duties, basic equipment servicing and basic clerical tasks			
3	Competency in operational, clerical skills plus:			
	– dealing with receivals, deliveries, loading and discharge, etc.	– using heavy equipment, operation of ship gear, basic servicing	– first aid	– semi-skilled maintenance (equipment and servicing) and use of hand tools
4	– processing of information relating to cargo, labour allocation and payroll	– operation of specialised and complex ship and shore equipment	– monitoring, maintenance and control of reefer plant	– maintenance trade person or gearman duties
5	– assistance and coordination of the work of lower level staff and liaison with supervisory staff			
6	– coordination and supervision of clerical areas	– coordination and supervision of stevedoring operations		– maintenance trade person special class
7	– plan and coordinate integrated stevedoring operations (including maintenance) and labour in connection with ships and/or cargo			
8	Not defined			

Source: Stevedoring Industry Award, clause 13

D EMPLOYEE CHARACTERISTICS

Stevedoring employees in this appendix refer to employment in the stevedoring industry — including bulk and break bulk operations as well as container operations.[1] Several characteristics of stevedoring employees, before and after reforms implemented by the Waterfront Industry Reform Authority (WIRA), are examined. The hours of work and remuneration of stevedoring employees are also discussed.

D.1 Gender

In 1991, over 95 per cent of stevedoring employees were men. The proportion of women has been increasing, particularly as a result of trainee intakes, but it remains low — less than 7 per cent in 1996.

D.2 Age

The combination of the WIRA retirement and redundancy program and recruitment significantly changed the age profile of stevedoring employees between 1991 and 1996 (figure D.1). An increase in the proportion of younger workers in the industry reduced the average age from approximately 48 in 1991 to 43 in 1996. Redundancies and early retirements substantially reduced the share of employees aged 55–64. However, the average age of stevedoring employees continues to be markedly higher than in the labour force as a whole (ABS 1996b).

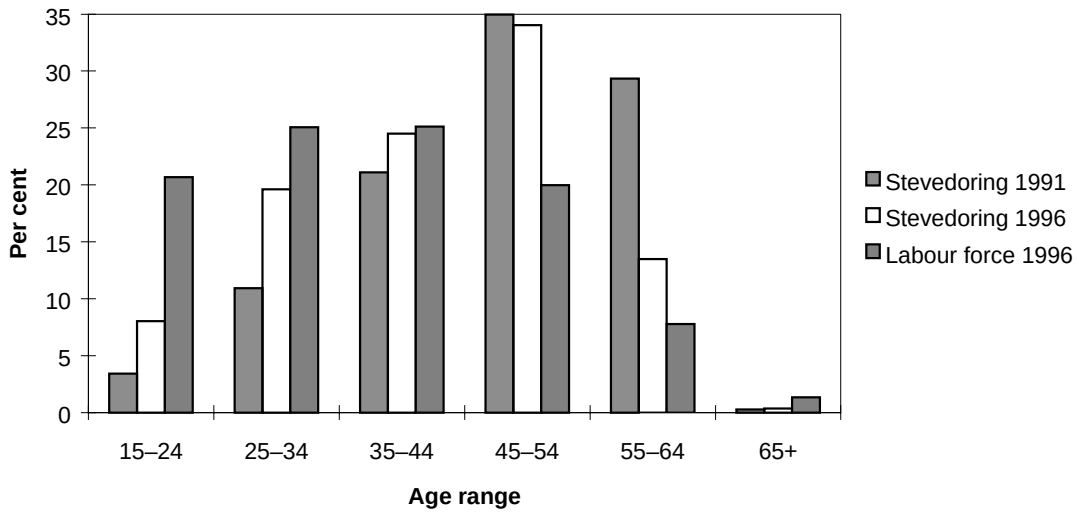
D.3 Birthplace

In 1996, approximately one quarter of stevedoring employees were born in a non-English speaking country, compared with about 14 per cent of the labour force as a whole (ABS 1996b; ABS unpublished census data). The proportion of

[1] The statistical classification of the stevedoring industry used in this appendix refers to Australian and New Zealand Standard Industrial Classification industry class 6621 (Stevedoring). Some bulk operations, such as coal terminals and wheat terminals are excluded from the stevedoring industry and included in industry class 6622 (Water transport terminals).

non-English speaking background stevedoring employees declined from approximately 31 per cent to 24 per cent over the period 1991–96. This partly reflects the changes in the age composition of stevedoring employees, with employees of a non-English speaking background being overrepresented in the older age groupings.

Figure D.1: Stevedoring employees and Australian labour force, by age[a]



a Includes employment in Australian and New Zealand Standard Industrial Classification class 6621 for 1996 and Australian Standard Industrial Classification class 5721 for 1991.

Sources: ABS (1996b); ABS unpublished census data

D.4 Occupation

The proportion of stevedoring employees in different occupational groups changed between 1991 and 1996, partly reflecting technological changes and the structure of the industry (figure D.2). The proportion of employees in operational areas (clerical workers, plant operators and labourers) declined from approximately 87 per cent in 1991 to 76 per cent in 1996. This was offset by a significantly higher proportion of employees in professional areas (including engineering and business management) and sales representatives.

Figure D.2: Stevedoring employees, by occupation[a]

a Includes employment in Australian and New Zealand Standard Industrial Classification class 6621 for 1996 and the Australian Standard Industrial Classification class 5721 for 1991.

Source: ABS unpublished census data

D.5 Educational attainment

Over the period 1991–96, the proportion of stevedoring employees with tertiary or vocational training qualifications increased from approximately 28 per cent to 39 per cent (ABS unpublished census data). The increase in educational attainment over the period mainly reflects an increase in the proportion of employees who had undertaken vocational, rather than tertiary, training.

Changes in the level of educational attainment across occupational groups are shown in table D.1. The increase in the proportion of plant operators and labourers with tertiary or vocational training qualifications partly reflects an increase in the opportunity for existing employees to attend training following WIRA reforms and the development of competency-based standards by the National Training Advisory Council (BTCE 1995a). In contrast, the proportion of managers with tertiary or vocational training qualifications declined by 11 percentage points between 1991 and 1996.

Table D.1: Proportion of occupational group with tertiary or vocational training, stevedoring employees[a] (per cent)

Occupation[b]	*1991*	*1996*
Managers	69	58
Professionals	62	78
Tradespersons	91	90
Clerks	19	22
Salespersons	18	36
Plant operators	22	28
Labourers	20	28

a Includes employment in Australian and New Zealand Standard Industrial Classification class 6621 for 1996 and the Australian Standard Industrial Classification class 5721 for 1991.

b Occupational groupings are classified according to the Australian Standard Classification of Occupations (first edition) for 1991 and the second edition for 1996.

Source: ABS unpublished census data

D.6 Average wages and hours worked

In 1996 the average gross weekly earnings of full-time, nonmanagerial stevedoring employees was in the top 5 per cent of wage and salary earners in Australia (ABS 1996a, ABS unpublished data).

The earnings of stevedoring employees vary across workplaces, partly reflecting differences in hours worked and remuneration arrangements negotiated in enterprise agreements at each workplace. Chapter 7 examines remuneration arrangements and the level of earnings and hours worked by employees in container stevedoring in more detail.

The average annual earnings of full-time, nonmanagerial stevedoring employees in the industry was approximately $72 000 in 1996. On average, full-time, nonmanagerial stevedoring employees worked approximately 45 hours per week in the same year (ABS unpublished data). Stevedoring employees earned significantly more than workers in similar occupational groups in other industries (table D.2).

Table D.2: Average weekly total earnings of stevedoring employees and selected occupational groups, 1996[a]

Occupation	*Average weekly total earnings*
	$
Stevedoring employees[b]	1393
Tradespersons	696
Clerks	654
Plant and machine operators and drivers	757
Labourers and related workers	601
All occupations	727

a Data presented for the selected occupational groupings are for adult, male, nonmanagerial employees in the Australian Standard Classification of Occupations (first edition) groups 4, 5, 7 and 8.

b Includes employment in Australian and New Zealand Standard Industrial Classification class 6621.

Sources: ABS (1996b); unpublished ABS data

E FACTORS AFFECTING THE LOADING AND UNLOADING OF SHIPS

This appendix discusses some of the factors that affect the performance of stevedore workplaces. These factors specifically relate to constraints on loading and unloading a ship. Other factors affecting performance such as work arrangements and distance between ports are discussed elsewhere.

E.1 Throughput

Participants in the study frequently noted that interport comparisons failed to account for the size of each operation. In particular, many claimed comparisons of Australian stevedores with those in Singapore, for example, were unfair. This was largely because of the port sizes and the types of ships differed. Four or five cranes may discharge an entire ship in the larger international ports, while in Australia it was invariably one, two, or at most, three cranes moving only a portion of the containers carried. This size consideration is also relevant for interworkplace comparisons within Australia. As Tim Blood, the Container Business Manager for P&O Ports Victoria, recently stated:

> If we had 90 per cent transhipment instead of 10 per cent and vessels of 6000 TEU capacity instead of 600 TEU, with single destination cargoes, and no late changes to cargo stowage and lower safety standards, we would achieve over 30 containers per crane on all vessels, all of the time. (MUA 1997b)

E.2 Difficult stows

Some stevedores, because of their location, often face small exchanges. The ports of Brisbane and Adelaide, being either a first or last port of call, tend to have more difficult stows. Often the movement of containers is not isolated to one part of the ship. A number of containers may need to be moved (and later restowed) to access the containers required. Similarly, the crane driver may have to stop lifting to move the crane to another part of the wharf to access a small number of containers. As Captain Andrews from Sea-Land explained:

> Adelaide may only have half the container rate of some Sea-Land terminals, but all our other terminals trade Sea-Land stowed ships. Stow is central to productivity. Sea-Land ships are computer stowed. The boxes that come off first are stowed on the side of the ship, not in the middle where you have to lift them four high to get them out. (MUA 1997b, p. 46)

Difficult stows may also be exacerbated by poor planning in previous ports of call. Containers may be placed in the wrong position, or may not correspond with the computer plan.

E.3 Mix of containers

The number of 40-foot containers versus 20-foot containers loaded and unloaded also affects crane productivity. The 20-foot containers are loaded on and off ships built with 40-foot cells. This slows the rate at which 20-foot containers can be loaded or unloaded because crane drivers are able to only use one cell guide. As a Sea-Land crane driver explained:

> If you have more than one crane working, the ship's ballast can't keep up. The vessel rocks and the box [container] comes out of the guide and you have to start all over again. So you go much slower to avoid this happening. Twenty-footers slow me down by about 10 boxes an hour. (MUA 1997b, p 46)

Obviously, the greater the proportion of containers to be loaded and unloaded that are 40-foot rather than 20-foot, the higher (all other things equal) the crane productivity. As the Sea-Land crane driver also noted:

> If we always had ships come in with around 400 40 footers all in one bay, instead of one or two here and one or two there, we would average 35–40 boxes [containers] an hour. I know, I've done it when the MYK ships come in from Japan with 600–700 boxes to exchange. (MUA 1997b, p 46)

E.4 Late delivery and receival

Stevedores are only one link in a complex transport and distribution chain. Stevedores can be delayed by transport companies failing to deliver containers on time. Late delivery of containers can affect the ability to plan and move the containers within the allocated shipping window. In the case of late receivals, some stevedores charge companies for delays in picking up containers because they can affect available pavement space.

F REFORMS IN THE STEVEDORING INDUSTRY

Between September 1989 and October 1992, a program of reforms under the Waterfront Industry Reform Authority (WIRA) was implemented. One feature of the reforms was a change from industry-based employment arrangements to enterprise employment. These reforms are discussed in this appendix and changes to work conditions, the size and composition of the workforce and the number of unions in the stevedoring industry (including bulk and break bulk operations as well as container operations) are examined.

F.1 Enterprise employment

The labour force, before the WIRA process, was organised on an industry basis. Each port was allocated a number of employees based on quotas adjusted quarterly to take account of the requirements of each port. There were opportunities for reviewing the allocation of labour to individual employers in changed circumstances.

At major ports, all registered employees were permanent employees of the stevedoring companies. Daily inter-hire transfers (administered by a 'labour coordinator' in each port) and quarterly reallocation of labour between companies (conducted by the employer body, the Association of Employers of Waterside Labour) allowed for the transfer of employees between stevedoring companies to meet changes in labour requirements. If a stevedoring company ceased operations, its entire workforce would be distributed among the remaining stevedoring companies in accordance with the proportion of port employment which each stevedore employed (ISC 1988, pp. 93–6).

Supplementary employees could be used from a register of employees maintained by the Association of Employers of Waterside Labour in periods of shortages of labour when labour requirements could not be met through transfers (ISC 1988, p. 103). However, little or no supplementary labour was used in major ports (ISC 1988, p. 94).

The main union representing stevedoring employees before WIRA was the Waterside Workers Federation (WWF). Under the industry labour arrangements, the WWF was involved in several aspects of labour management in the stevedoring industry through its membership of port committees in each port. The committees comprised equal representation from employers and the WWF. Port committees had a role in determining the quantity of permanent labour

employed in different ports, reviewing labour transfer arrangements and interviewing short-listed candidates for vacant positions (ISC 1988, pp. 108–9).

The WIRA process abolished the labour pooling arrangements and operational employees became directly employed by each stevedore. There are now no arrangements for the transfer of employees between enterprises. Under enterprise employment, employees depend upon the success of the employer in attracting business to the enterprise. Attitudinal change reflecting a change in loyalty from the industry to the employer was seen to assist in the improvement of productivity and the introduction of innovation (BTCE 1995a, p. 10).

Enterprises were also encouraged to manage the dispute resolution process on an enterprise basis as industry-specific provisions relating to port conciliation committees were removed from industrial relations legislation. Disputes were able to be referred to the Australian Industrial Relations Commission as a last resort (WIRA 1989, p. 13).

F.2 Determination of workplace conditions

A range of 21 different awards in the stevedoring industry were replaced by a single award in November 1991.[1] The Stevedoring Industry Award continues to underpin enterprise agreements in the industry. The award established eight new skills-based job classifications, replacing 10 different job types (each with several classifications) which existed in previous awards (BTCE 1995a, p. 17).

The new skill classifications aimed to provide career paths and opportunities to improve job satisfaction, and increase multiskilling and flexibility (BTCE 1995a, p. 19). Training programs were also developed by each employer in accordance with the needs of the enterprise and standards were established by the National Training Advisory Council (*Stevedoring Industry Award 1991*, clause 40).

Some work arrangements, such as incentive schemes and rostering, were left to be negotiated in enterprise agreements at each workplace. Since the conclusion of the WIRA process, parties in container stevedoring have been through the negotiation process and have certified enterprise agreements on two or three occasions. Enterprise agreements presently in operation extend until the end of 1999 in some cases.

[1] A separate award, the *Stevedoring Australian Vocational Training Systems Award 1994*, covers trainees. Long service leave arrangements are covered by the *Stevedoring Industry (Long Service Leave) Award 1992*.

F.3 Workforce size and composition

The size and average employee age of operational employees in the stevedoring industry has changed through a program of early retirement and redundancy and through recruitment. The redundancy program, under which 4479 employees left the industry, was partly funded by a direct contribution of $165 million by the Commonwealth Government. Users of the stevedoring industry contributed $254 million.

A further 840 workers left under normal industry arrangements. By October 1992, 265 new employees had entered the industry. As a result of the program, the stevedoring workforce was reduced from 8872 in September 1989 to 3800 by December 1993. During this period, the average age of employees fell from 49 years to 44 years (BTCE 1995a).

F.4 Union amalgamation

More than 20 unions had members involved in waterfront activities before the WIRA process (ISC 1988, p. 9). Union rationalisation, although not part of the WIRA reforms, was encouraged by several factors: the policies of the Australian Council of Trade Unions and the WWF of encouraging union amalgamations in the maritime industries; the development of the single industry award; and federal legislation which required a higher number of members for federal union registration.

Between 1989 and 1993 several union amalgamations reduced the number of unions in the stevedoring industry to two — the Australian Maritime Officers' Union (AMOU) and the Maritime Union of Australia (MUA).

The AMOU was formed from a merger between the Australian Stevedoring Supervisors' Association and the Maritime Services Guild. The MUA was formed from an amalgamation of the Seamans Union of Australia and the WWF in July 1993. (Previously the WWF had already subsumed the Australian Foreman's Stevedores' Association (which represented foremen) and some members of the Federated Miscellaneous Workers' Union (which represented watchmen)). The MUA also represents a wide range of employees in other maritime-related industries, including offshore oil and gas facilities, harbour transport and port and maritime authorities.

G OCCUPATIONAL HEALTH AND SAFETY

Safety is a major issue at all stevedoring workplaces. Safety committees operate in each Australian workplace examined to communicate information about safety issues between management and employees (chapter 3). A recent study found that the stevedoring industry (including bulk and break bulk as well as container operations) was 'performing very poorly in comparison with other sectors of the maritime industry and other major industries in Australia' (Easson, McCann and Ronfeldt 1997, p. 1).[1]

Easson, McCann and Ronfeldt (1997) used data from Worksafe Australia. For several reasons, these data should be interpreted with care. The data only relate to *claims* involving a fatality, a permanent disability or a temporary disability resulting in an absence from work of more than five working days. Further, the data do not include Victoria or the ACT workplaces because there are definitional differences.[2] The data are also of limited use to examine relationships about the possible causes of the safety performance of the stevedoring industry:

> It is important to note that the data [are] primarily concerned about 'outcomes', rather than processes. Such an analysis is inherently limited in terms of its ability to explain the causes of injury or disease or to account for the differences between industry sectors. Moreover, such data ... [do] not indicate anything significant about cost and efficiency consequences. (Easson, McCann and Ronfeldt 1997, p. 5)

G.1 Indicators of occupational health and safety in the stevedoring industry

Between 1991-92 and 1994-95 the stevedoring industry performed poorly compared with other industries (chapter 3).[3] The stevedoring industry has

---

1 The statistical classification of the stevedoring industry used in this appendix refers to Australian and New Zealand Standard Industrial Classification industry class 6621 (Stevedoring). Some bulk operations, such as coal terminals and wheat terminals are excluded from the stevedoring industry and included in industry class 6622 (Water transport terminals).

2 See Worksafe (1996) for information on the limitations of data on compensated accidents.

3 Easson, McCann and Ronfeldt (1997, p. 15) noted that caution should be applied in comparing stevedoring with broader industry groups for several reasons. One reason is that statistics relating to stevedoring may be more tightly focused on hazardous work because

shown an upward trend in several indicators of occupational health and safety outcomes since 1991-92. Over the period 1991-92 to 1994-95, the incidence of new cases in the stevedoring industry increased from approximately 109 per 1000 employees to around 170 — an increase of over 50 per cent. It is unlikely that physical working conditions over the period deteriorated; they may even have improved. Ergonomic seats that provide drivers with a more comfortable driving environment, for example, are a feature of new equipment.

Data obtained from stevedores on accidents and injuries since 1994-95 (the latest year for which comprehensive data are available from Worksafe) indicate that there has been no significant change in the incidence of accidents at the Australian stevedoring workplaces examined.

No comparable data on accidents were available for Fergusson Terminal, New Zealand. During 1996-97, Ports of Auckland reported 121 lost time accidents (defined as accidents which lead to an absence extending beyond the shift) for all of its employees. Over the past five years at Fergusson Terminal, two fatalities have occurred.[4]

G.2 Mechanism of injuries

The major mechanism of injuries[5] in the stevedoring industry between 1992-93 to 1994-95 were sound and pressure injuries, accounting for approximately 30 per cent of accidents.

Falls, trips and slips (25 per cent) and body stressing, such as muscular stress and repetitive movement (20 per cent), were also major mechanisms of injuries. The incidence of these mechanisms of injuries is high in the stevedoring industry compared with other industries (table G.1).

Easson, McCann and Ronfeldt (1997) considered that a possible explanation for the high level of claims in stevedoring is the pattern of compensation claims, whereby employees leaving the industry make claims for injuries such as hearing loss.

there may be a lower proportion of non-operational employees in stevedoring compared with other industries.

[4] Permanent employment at Fergusson Terminal accounts for approximately 30 per cent of the total employment at Ports of Auckland.

[5] 'Mechanism' refers to the means by which the injury or illness (for which the employee was compensated) was inflicted.

Table G.1: Average incidence of mechanism of injury and disease, new cases, 1992-93 to 1994-95 ('000 employees)

Industry	*Falls, trips and slips of a person*	*Hitting objects with a part of the body*	*Being hit by moving objects*	*Sound and pressure*	*Body stressing*	*Other and not specified*	*Total*
Stevedoring	43.1	7.8	22.7	44.9	33.1	6.6	161.1
Mining	11.9	3.9	11.8	16.0	16.0	6.5	66.2
Manufacturing	6.0	5.7	7.7	6.7	17.9	4.5	48.4
Construction	11.2	4.4	6.9	6.6	15.3	3.7	48.2
Transport and storage	10.5	2.8	6.4	7.6	16.5	6.1	50.0
All industries	**5.3**	**2.5**	**3.9**	**2.5**	**10.9**	**3.7**	**28.9**

Source: Easson, McCann and Ronfeldt (1997)

The incidence of different mechanisms of injuries incurred in the stevedoring industry indicates that injuries associated with mechanical equipment are more significant than those associated with manual tasks. Easson, McCann and Ronfeldt (1997, p. 35) considered that this supports an impression that the stevedoring industry is 'plagued by unnecessary and easily avoided injuries and disease', which may be remedied by a 'more systematic approach to occupational health and safety management and regulation'.

H DISCIPLINARY MEASURES

Disciplinary measures can be invoked by employers and employees. Management has the legal right to dismiss or discipline employees under specified grounds. Employees have recourse to personal grievance procedures if they believe they have been unfairly treated or dismissed by the enterprise. Industrial action (in its various forms) is available to either party.

Employees can be dismissed for gross breaches of their contract of employment. Grounds for dismissal are set out in the *Stevedoring Industry Award 1991* (clause 8). The grounds include: being absent from work without permission; refusal of duty (unless the refusal relates to a genuine safety issue); wilful neglect of duty; failure to work according to reasonable instructions; being under the influence of alcohol or drugs; continued or repeated unsafe conduct; and assault or abusive behaviour. Employees summarily dismissed are not entitled to termination payments.

Detailed discussions indicated that dismissal has been relatively infrequent in the stevedoring industry. Management at one Australian workplace commented that dismissal can be a costly and protracted exercise, requiring detailed recording of an employee's breaches of the employment contract. As noted in chapter 5, there have been several recent cases of employees being dismissed at Australian workplaces for leaving work without permission. These employees were later re-instated by the Australian Industrial Relations Commission (AIRC).

Other disciplinary measures (which fall short of dismissal) include the 'docking' of pay and removal from duties. The Stevedoring Industry Award allows the employer, for defined instances of unsatisfactory performance, to suspend an employee for the balance of a shift (clause 8). Management at one Australian workplace, for example, measures employees' performance and, if found unsatisfactory, places the subject employees 'off pay' for the balance of the shift. At this workplace, performance of crane drivers is also monitored on a shift-by-shift basis, with management reserving the right to replace crane drivers if their rates of work fall below acceptable standards; the enterprise agreement states that management determines the placement of employees to particular tasks at the start of, and during, the shift.

According to management, employees who consistently underperform are generally given opportunities and assistance to improve their performance. Underperforming employees at one Australian workplace are interviewed by

management with a union official in attendance. The employees are counselled about their performance and retraining may be considered.

Personal grievance procedures are outlined in several of the enterprise agreements examined. The procedures can be activated by employees if they claim the company has:

- unjustly dismissed them;
- passed them over for promotion or placement in a training course; or
- taken some other action which is unjustifiable.

In the first case, the matter is progressed according to clause 8 in the Stevedoring Industry Award or provisions in the *Workplace Relations Act 1996.* In the second case, employees must lodge an appeal, documenting the grounds for the appeal including any supporting evidence. Management is obliged to reconsider all aspects of the case and, if requested, give the employees or their union representative the opportunity to present their case personally.

In the third case, employees or their union representative must notify management of their concerns. If the matter cannot be resolved by management, there are several options for seeking a resolution, including: discussions between management and union representatives; referral to a grievance committee (consisting of management and union representatives); referral to an agreed arbitrator/conciliator; or referral to the AIRC.

I THE NEW ZEALAND EXPERIENCE

This appendix summarises the main elements of reform in New Zealand and its effect on stevedore performance and work arrangements, rather than presenting New Zealand as a 'model' to be emulated.

I.1 Reform in New Zealand

New Zealand's substantive labour market reform in 1991 was preceded by broad economic reform, including financial market reforms, tariff reductions, the removal of most industry subsidies, tax reform and public sector reform (Evans et al. 1996). Port reforms in New Zealand were introduced in 1988 and 1990, while transport reforms commenced in the early 1980s.

Factors that facilitated waterfront reform in New Zealand included:

- general acceptance that reform was necessary;
- simultaneous reform across many industries, including all forms of transport;
- the international openness of the New Zealand economy, which made ports a key area of infrastructure; and
- the New Zealand Government's ability to change legislation nationwide.

Port reform

In 1988, the *New Zealand Port Companies Act 1988* abolished the harbour boards which had run the various ports for many years. Port authorities were established to operate as commercially viable companies. Centralised controls over port planning and prices were removed (Vasey 1997).

The Waterfront Industry Commission, which administered an industry labour pool from which labour was allocated to the stevedoring firms, was abolished under the *Waterfront Reform Act 1989*. This removed centralised control over employment, introduced enterprise-based employment and allowed casual labour (BIE 1995b).

Full private ownership of port companies was allowed under the *Port Companies Amendment Act 1990*. The ports were corporatised and ownership passed from government harbour boards to regional councils. Regional councils are permitted to sell their ownership, but not below 50 per cent unless the New

Zealand Government agrees. Five ports are now partly listed on the New Zealand Stock Exchange (Hirst 1997). In the case of the Ports of Auckland, 80 per cent of shares are owned by the Auckland Regional Services Trust, a statutory body.

Transport reform

In rail freight, the Railways Corporation was established from the former department in 1982. The corporation was restructured into New Zealand Rail and privatised in 1993 (Duncan 1996). By 1992, New Zealand Rail had 500 employees — one quarter of the number employed ten years previously.

Road transport and coastal shipping were deregulated in parallel with rail. There are now few barriers to entry in road transport and competition is intense (Duncan and Bollard 1992). A summary of the freight transport reforms is listed in table I.1.

Table I.1: Chronology of freight transport reforms in New Zealand

Year	*Reform*
1978	Introduction of road user charges, initially at a low level Review of all transport licensing
1980	Inquiry into freight forwarding industry
1982	Corporatisation of NZ railways (previously a government department) Circulation of discussion paper on Land Transport Licences and Regulation
1983	Regulatory change in the Transport Amendment Act (no. 2)
1984	Replacement of quantity licensing for road haulage End of maximum freight charge regulation Removal of compulsory union and transport association memberships Major revision of road user charges
1986	Completion of phase-out of permits of long distance haulage Removal of imposts on road transport, including excise taxes on fuel and reduced import tariffs on tyres and trucks
1989	Corporatisation of ports Removal of centralised control of waterfront labour
1990	Privatisation of ports allowed
1991	Removal of cabotage on coastal shipping
1993	Privatisation of NZ rail

Sources: Duncan (1996); Duncan and Bollard (1992)

Labour market reform

Between 1984 and 1990, there was considerable debate about the need for increased labour market flexibility in New Zealand and a number of regulatory reforms occurred. These reforms initiated some changes in labour market structure, but major reform did not take place until 1991 with the introduction of the *Employment Contracts Act 1991*. The key elements of the Act are (Maloney and Savage 1996):

- *freedom of association:* pre- or post-entry closed shops are illegal and union membership is voluntary;
- *bargaining structures:* employers must recognise bargaining agents nominated by individual employees. The status of such agents is always contestable. Each employee may choose to negotiate an individual employment contract or be bound by a collective contract. The employer is under no obligation to agree to a collective contract — whether contracts are individual or collective is always a matter for negotiation by the parties;
- *personal grievances:* all contracts must contain an effective procedure for dealing with personal grievances (such as disputes over unjustified dismissal and discrimination) and settlement of disputes of contract interpretation, application or operation;
- *enforcement of employment contracts:* contracts create enforceable rights, with enforcement being carried out by the parties to them;
- *strikes and lockouts:* constraints are placed on the right to strike or lockout. In particular, it is unlawful to strike while a collective contract is still in force. Employers in essential services including ports, must be given at least 14 days notice of the intention to strike;
- *institutions:* the Act establishes an Employment Court and an Employment Tribunal to facilitate the resolution of conflicts over the content of contracts and personal grievances; and
- *minimum terms and conditions of employment:* for all employees related to wages, leave, occupational safety and health, and dispute resolution procedures. The national awards system was abolished.

I.2 Some effects of reform

This section examines the main outcomes of the reform process, with an emphasis on the effects on the stevedoring industry and some comparisons with Australian stevedoring.

Port reforms

Within a year of the reforms, competition between ports increased and port companies improved their efficiency and profitability. Port charges fell and employment declined from 3100 waterside workers in October 1989 to 1300 several months later (Trace 1997). The BIE (1995b) estimated that New Zealand ports in 1995 handled as much cargo as before 1988 with about half the labour force. Indeed, waterfront reform is considered to have 'transformed New Zealand ports from among the most expensive and inefficient in the world to service providers of an international standard' (Reveley 1997).

Table I.2 compares the Ports of Auckland and selected Australian ports in terms of ship turnaround time — one indicator for which some comparison over time can be made for these ports. The earlier data on turnaround time for the Ports of Auckland are not directly comparable with data for the Australian ports, but they indicate that turnaround time has substantially improved in recent years in Auckland relative to that in most Australian ports. In Australia, the port of Adelaide's turnaround also improved substantially.

Table I.2: Median ship turnaround time[a]

Port	*July–December 1993*	*July–December 1996*
	hours	hours
Sydney	42.0	41.0
Melbourne	44.5	38.0
Brisbane	28.0	31.6
Adelaide	27.5	18.5
Auckland	_[b]	15.2[c]

a Inter-temporal comparisons only should be made as each port has a different set of parameters to measure the turnaround time of ships calling at container terminals.

b Estimate for 1993 is not available. Median ship turnaround time in 1989 was 38.0 hours.

c Estimate is for 1996.

Sources: BTCE (1997c; 1994); Vasey (1997)

Another performance indicator is stevedoring charges by port. Changes in port charges over time are not available, but a 1995 study by the Bureau of Transport and Communications Economics compared stevedoring charges in selected Australian and New Zealand ports. Overall, the study found that stevedoring charges are lower at New Zealand ports compared with the selected Australian ports (table I.3).

Table I.3: Relative stevedoring charges[a] for containers in selected Australian and New Zealand ports, 1995

Port	*Index: Sydney = 100*
Sydney	100
Melbourne	96–102
Auckland	51–87
Wellington	59–81
Lyttleton	60–75

a Charge per TEU or lift.

Source: BTCE (1995b)

The reduced charges could reflect the substantial fall in stevedoring operating costs (before interest) following reform. Operating costs at the Ports of Auckland in 1988, for example, were 100 per cent of total turnover. These costs fell to 60 per cent of total turnover in 1996 (Vasey 1997).

The pressure from competition that drives improvements in work arrangements is substantially greater in New Zealand where competition among stevedores (within and between ports) is fierce. This reflects several factors:

- a greater number of ports in close geographic proximity;
- improved interport road and rail links as a result of transport reform;
- the absence of stevedores that operate nationwide; and
- low barriers to entry, partly reflecting the availability of common user facilities at several ports.[1]

Port companies do not have a landlord function in New Zealand, as do many in Australia. In New Zealand ports, stevedoring operations are often operated by the port company, and common user (or multi-user) facilities provided by the port company are used by several stevedores at several ports. However, the ports of Tauranga and Napier only have common user facilities because the port company does not provide stevedoring services.

The port company at the Ports of Auckland has exclusive use of the main container terminal, Fergusson Terminal. Three other stevedores use the common user facilities for containers at Bledisloe Terminal. They compete with each other and with the port company. New entrants have few overheads because the common user berths are available. Therefore, they can undercut existing

1 These port facilities, including berths and equipment such as straddle carriers and cranes, can be used by a number of stevedores that have a contract with the port company.

stevedores and contracts frequently change hands. Geoff Vasey, the Chief Executive of the Ports of Auckland, described this arrangement:

> No New Zealand port leases berths to stevedoring companies. Our facilities are either dedicated terminals, where the whole operation is run by the port company, or they are multiuser facilities where stevedores come and go ... (Vasey 1997)

Discussions with New Zealand stevedores revealed that new entrants have few overheads and can undercut existing stevedores because ports provide common user facilities. New entrants therefore do not face the same barriers to entry that they would in Australia. This results in intense competition and the loss of a major contract has the potential to force companies out of business. Thus, the incentive to improve efficiency is great.

Transport reforms

Reform of the road freight and coastal shipping industries contributed to a highly competitive domestic freight industry, which induced reform of the rail industry.

Total New Zealand rail staff fell from 14 900 to 4600 between 1987 and 1994. Yet many staff reductions had been made before 1987, after the Railways Department was corporatised in 1982. Most corporatised and privatised organisations in New Zealand maintained or increased output while significantly reducing their staff numbers (Duncan 1996).

The Queensland Manufacturing Industry Forum's submission to the Black Coal Inquiry noted the benefits of rail reform in New Zealand:

> In New Zealand, the monopoly on rail service has been removed and the public corporation has been privatised. Over the period 1983–93, freight rates decreased by 50 per cent and staff decreased by 80 per cent. (1997)

One New Zealand stevedore manager noted that improved land transport following reform has resulted in stevedore business shifting between ports.

Labour market reforms

A survey examining the effects of the Employment Contracts Act across a range of employers and industries was undertaken in 1995 in conjunction with the New Zealand's Institute of Economic Research's *Quarterly Survey of Business Opinion* (Savage and Cooling 1996). According to the 562 employers who responded, the main outcomes of the Act, which varied between industries, were:

- lower allowances and penalty rates but higher ordinary time wages and greater use of performance-based pay. Therefore, the net effect on the overall wage bill tended to be small;
- the predominant use of individual employment contracts in almost half of the companies. Individual contracts were more common in businesses that had a relatively low level of unionisation before the Employment Contracts Act;
- the main changes to work arrangements being an increase in ordinary time wage rates, an increase in flexible work arrangements, reduced demarcation, greater multiskilling and increased use of performance-based pay;
- enhanced productivity, operational flexibility and greater training being the most significant outcomes reported by employers. Increased employment, particularly of casual and part-time jobs, was also reported; and
- unionisation decreasing in half of the surveyed businesses. However, the level of unionisation in each business was closely related to its level of unionisation before the Act.

The survey indicated that labour market reform in New Zealand has had significant effects on bargaining structures, pay and conditions. These appear to have flowed through into changes in business outcomes — three quarters of the employers surveyed considered that the Employment Contracts Act positively contributed to their overall performance. Most importantly, there has been a significant decline in the level of industrial disputes since the Act across all industries (table I.4).

Table I.4: Trends in industrial action — work stoppages (five-year averages)

Years (December)	*Stoppages*	*Workers involved*	*Working days lost*	*Average days lost per worker*	*Estimated loss in wages ($m)*
1986–90	178	82 727	520 260	6.1	48.7
1991–95	64	29 632	65 632	2.3	9.0

Source: Statistics New Zealand, as presented in Savage (1997)

Work arrangements in stevedoring

Changes to labour markets and work arrangements following reform have been widespread, but the effects vary across industries. The degree of regulatory

reform in each industry was an important factor affecting the extent to which work arrangements changed in each industry. The extent of industry competition therefore created additional pressure on employers and employees to change work arrangements. Another factor was the willingness of employers to make significant changes to work arrangements soon after the introduction of the Employment Contracts Act. Industries which made small changes found it more difficult to later negotiate workplace reforms.

Discussions with several New Zealand stevedores and the stevedoring union revealed that reform in stevedoring resulted in more flexible work arrangements than those in Australia, with substantial variation among ports and among stevedores within a port.

The majority of employment contracts are collective. These contracts are confidential, so information on their contents is based on discussions with New Zealand stevedores, unless otherwise specified.

Unlike the Australian enterprise agreements examined, for which most work arrangements are prescribed in some detail, New Zealand stevedore contracts do not specify roster arrangements, shift breaks and manning levels.

Workplace culture

One union (the Waterfront Workers Union) represents operational employees, but negotiations at each port take place with the local union branch. Local representatives are conscious that competition from another port may result in their port closing, so the incentive to negotiate change is greater than in many Australian ports.

The level of unionisation varies between stevedores in New Zealand. Union coverage at Fergusson Terminal, Ports of Auckland, is about 70 per cent. At another stevedore at the Ports of Auckland, 85 per cent of the permanent workforce are union members.

As in Australia, there is a long history of adversarial relations between employers and employees and this is only changing slowly. Many employees continue to identify more closely with their union than with their employer, for example:

> Most stevedores opt for collective agreements as it is very difficult to develop individual contracts without trust between employee and employer. New Zealand stevedoring in 1990 had no history of trust ... However ... since 1990 ... we have tried to treat workers as equal to staff. (Manager)

> The Employment Contracts Act is not all one way. It does not provide protection for the employer. A contract still won't be changed without the union agreeing. (Manager)

> Some of the men that remained have never been able to come to grips with being part of the company — they cannot understand that their livelihood relies on the company keeping contracts and succeeding, rather than the union. ... The majority of workers are still union members as too many hassles are created for them if they are not. Even most of the new workers ... join the union because they are intimidated. The union, therefore, still has an influence at the workplace ... The culture is slowly changing but it is long term. (Manager)

Rostering

Rostering varies among stevedores. A selection of arrangements are listed below.

- Several stevedores at different ports have adopted a system whereby any five days out of seven are worked with no overtime on weekends.
- One stevedore has some contracts that are Monday to Friday, while others cover weekend, nightshift and overtime work. Some are based on working five days out of seven while others are based on working 40 hours over seven days.
- Another stevedore has moved from three shifts to just-in-time with a variable shift length. This is to avoid paying for idle time when the shift starts at 7 am and finishes at 3 pm, but the ship arrives at 1 pm.
- Another stevedore used to have eight-hour shifts, but these are now flexible up to 12 hours. This stevedore has a separate weekend roster and offers employees a choice of which weekend out of three they have off.
- At one stevedore, permanent employees still receive priority for additional work over casual employees, but the stevedore would like this priority removed.

One stevedore said that it would not run double headers for safety reasons. A ceiling of 70–80 hours per week for each employee has been imposed to help reduce the injury rate.

Manning

Unlike the Australian enterprise agreements examined, minimum manning levels (both total permanent stevedore employment and gang size) are not specified in stevedore employment contracts. Gang sizes can therefore be varied downwards if desired.

Some New Zealand stevedores employ only casuals, with a few permanent supervisors. Other stevedores have less than 25 per cent of their total workforce as casuals.

Contracting

Before reform it was difficult to contract out, but stevedores are now able to contract out any activity. A Ports of Auckland manager noted that during the reform period, the cost of each of their services was compared with the cost of contracting out. Services were contracted out if cost savings could be made, and excess stevedore employees were made redundant.

Only some stevedores contract out activities, such as maintenance. Ports of Auckland, for example, has its own workshop and does maintenance for other stevedores as well, whereas Wellington Stevedoring Services outsources maintenance and the Port of Wellington does its own maintenance but does not undertake work for others.

One stevedore made substantial savings by reducing the incidence of idle time. It achieved the savings by unloading and loading bulk ships itself and using contractors for unloading and loading other ships.

Remuneration

The level and type of remuneration vary between New Zealand stevedores. For example:

- one stevedore has an hourly rate of NZ$21.70 that does not vary between grades but pays up to NZ$30 for the night shift. Casuals are paid almost half this rate, at NZ$12.50 an hour;
- another stevedore has base pay of NZ$18.50 an hour with an overtime rate of NZ$21.40. Casuals are paid about NZ$13 an hour and approximately NZ$16 an hour for overtime; and
- idle time is paid by some stevedores, but not by others. One stevedore pays a retainer for idle time, but this is less than what the employee would be paid when working.

Productivity bonuses and payments are not paid by New Zealand stevedores examined.

Crane drivers and foremen at the Ports of Auckland earn around NZ$65 000 per year. This income is well within the upper quintile of New Zealand personal incomes (Statistics New Zealand 1998).

J WORKPLACE NEGOTIATIONS, AWARDS AND AGREEMENTS

The advent of enterprise bargaining meant that negotiation of stevedoring work arrangements shifted from the industry (and awards) to the workplace and enterprise[1] agreements. Agreements continue to be introduced, implemented and changed as a result of negotiation between the relevant parties within the workplace. However, the process is often complex, with a variety of factors influencing the negotiation process. This process is discussed in section J.1 while the outcomes (that is, the work arrangements examined in this study) and their interrelationships with awards and agreements are covered in section J.2. The impact of these work arrangements on workplace performance and on employees is discussed in chapters 4–8.

J.1 How are work arrangements determined?

The outcome of negotiation of work arrangements at the workplace is influenced by factors both internal and external to the stevedore. Workplace-specific (internal) factors, such as customer service requirements, the type and age of equipment, and the ease of substitution between labour and other inputs, can contribute to the persistence of particular work arrangements depending on how they influence each party's estimation of the benefits and costs in the negotiation process. These benefits and costs, and therefore negotiation outcomes, are likely to vary between workplaces.

Institutional (external) factors, particularly industrial relations regulation, establish the framework in which bargaining takes place, and therefore can also affect the benefits and costs of bargaining[2] at the workplace in such a way as to facilitate or hinder changes to work arrangements.

Some external factors of particular importance to work arrangement outcomes in the stevedoring industry include:

- the Australian Industrial Relations Commission (AIRC), which sets the industry-wide conditions by regulating awards that apply to the stevedoring industry. Other functions of the AIRC that affect the

[1] Relates to an individual workplace.

[2] The degree of certainty, as well as the level, of benefits and costs is also important.

stevedoring industry include its role in the resolution of disputes, assistance with workplace bargaining and regulation of employee representation by unions;

- the *Workplace Relations Act 1996*, which sets the framework for workplace-focused negotiations and sets the responsibilities and duties of parties directly involved in negotiating enterprise agreements and third parties, such as the AIRC and Employment Advocate;
- the *Trade Practices Act 1974*, which provides a means for an affected party to apply for injunctive relief from secondary industrial action that may disrupt the workplace;
- the Employment Advocate, who provides assistance and advice to employers and employees about their rights and obligations under the Workplace Relations Act, including relevant award and statutory entitlements. The Employment Advocate also administers the negotiation of Australian Workplace Agreements and investigates breaches of freedom-of-association provisions in the Workplace Relations Act;
- the Federal Court, which (among its other functions) hears appeals on AIRC decisions, issues injunctions under the Trade Practices Act and enforces directions made by the AIRC;
- operational requirements of legislation (such as the *Customs Act 1901*) and agencies (such as the Australian Quarantine and Inspection Service), which affect stevedores' handling procedures; and
- federal and state occupational, health and safety legislation and regulation affecting workplace safety, and Marine Orders, which regulate ship-board safety.

At the workplace, significant changes in work arrangements are considered within the context of a bargaining process. This may be continuous — for example, changes to work arrangements at several stevedoring workplaces are negotiated and implemented during the life of an enterprise agreement as issues arise — or more episodic, with negotiation occurring at the time of renegotiation of an agreement (table J.1). However, most changes occur at the time of renegotiation.

The particular package of work arrangements which forms an enterprise agreement is influenced by the specific workplace characteristics and institutional factors noted above. Bargaining outcomes will also be influenced by the negotiating expertise of the parties, the relative strength of the parties and the extent to which organisational hierarchy (for both the stevedore and unions)

brings broader organisational strategy to bear on workplace bargaining. These issues are discussed in detail in chapter 9.

Table J.1: How change to work arrangements is negotiated

Type of negotiation	*Workplace*
Ongoing and formalised when enterprise agreement is renegotiated[a]	Sea-Land Adelaide CTAL Sydney Patrick Brisbane Ports of Auckland Patrick Melbourne
Keep to agreement and alter when agreement is renegotiated	P&O Ports Melbourne

a Most changes, however, occur at the time of renegotiation of enterprise agreements.

Sources: Workplace information requests

J.2 Comparison of work arrangements in the award and agreements

Enterprise agreements represent the formal outcome of the negotiation process in each of the Australian container stevedoring workplaces examined. This section reviews the work arrangements examined in this study in the context of these enterprise agreements and the *Stevedoring Industry Award 1991*, focusing on the significance of the award and agreements and comparisons between them.

Enterprise agreements

Formal enterprise agreements were first developed in the stevedoring industry as part of the Waterfront Industry Reform Authority (WIRA) process. Previously, there were often only poorly documented 'customary' agreements. The move to enterprise employment (1989–1991) resulted in 108 agreements being implemented in the industry by mid-1992, including agreements at Conaust and Strang Patrick Stevedoring (predecessors to P&O Ports and Patrick respectively) (WIRA 1992).

Each of the Australian workplaces examined has negotiated two or three collective agreements; Patrick Melbourne has recently finalised its third agreement while CTAL Sydney is currently negotiating its third. All agreements have been negotiated on a collective basis involving employers and representative unions.

Collective agreements are also the norm at Fergusson Terminal in Auckland, New Zealand (appendix I). However, given that individual employment agreements are also significant there, and that all such agreements are confidential, this section will focus on comparisons between Australian workplaces only.

The enterprise agreements examined below are very prescriptive, covering a broad range of issues in considerable detail. There are six pages in Patrick Melbourne's enterprise agreements, for example, that detail rostering and allocation arrangements alone.

Stevedoring Industry Award

The Stevedoring Industry Award was introduced as a result of the WIRA process, effectively reducing 21 awards into one. It also established the exclusive right of the Maritime Union of Australia (MUA) to represent operational employees in negotiations where previously eight unions had been involved.

The approach taken in the award was, among other things, to:

- facilitate enterprise employment;
- establish skill-related career paths;
- eliminate impediments to multiskilling;
- create appropriate relativities between different worker categories within the industry and at the enterprise level; and
- ensure that work patterns and arrangements enhance flexibility and efficiency. (Stevedoring Industry Award, preamble)

Significance of the award and agreements

By providing the benchmark for the test of 'no-disadvantage',[3] the Stevedoring Industry Award provides a set of base provisions (underlying principles or rules) from which enterprise agreements can be negotiated. Base provisions that are relevant to the work arrangements examined in this study include those relating to shift premiums, shift working times, the base weekly wage and leave conditions (table 2.8) (see table J.3 for more detail on relevant provisions in the Stevedoring Industry Award and each enterprise agreement).

[3] Under the 'no-disadvantage' test, an agreement may not 'on balance' result in a 'reduction in overall terms and conditions' of employees compared with the 'relevant award', although individual provisions may be changed (chapter 9).

The Stevedoring Industry Award is superseded by the provisions of enterprise agreements to the extent of any inconsistencies, but the award does provide the structural basis for the development of detailed work arrangements in enterprise agreements. Its provisions regarding shift length and starting times, for example, form the basis of detailed roster systems negotiated at each workplace and are incorporated in the relevant agreement.

Most work arrangements negotiated at the workplace and examined in this study have been incorporated in agreements, rather than the Stevedoring Industry Award. Provisions relating to the order of engagement, roster schedules, manning scales and remuneration schemes, for example, are all specified in agreements (table 2.9; table J.3). These work arrangements are usually applied on-site with little variation from the agreement.

There are important links between the award provisions, between an enterprise agreement's provisions and between the Stevedoring Industry Award and an agreement. Moreover, the effects of some provisions are magnified when linked to others. Performance constraints evolve from these interactions. Shift premiums combined with penalty rates and the order of engagement, for example, increase incentives to create overtime. In some cases, operational employees can earn up to three times the base rate of pay for a shift before supplementary employees can be hired. These high overtime rates can render productivity bonus schemes ineffective. In addition, the pooling of productivity scheme earnings also makes the productivity bonuses seem small relative to potential overtime earnings (see chapter 7 for a detailed discussion of these issues).

There are a few work arrangements examined in this study that are not specified in enterprise agreements or in the Stevedoring Industry Award. These work arrangements have tended to develop as a result of custom and tradition. They include longer shift breaks and delays in starting shifts.

Two other examples are worth noting. First, although some provisions relating to the equalisation scheme are specified in the enterprise agreements examined, details of relevance to its operation are not specified — for example, how points are allocated to employees and how many points are earned for each shift.

Second, although union preference specified in the award (clause 16) can not be legally enforced as a result of the Workplace Relations Act, virtually all operational employees are union members.

As noted in section J.1, other work arrangements may be of an interim nature, being negotiated and implemented at the workplace before the due date for

renegotiation of the registered enterprise agreement (for example, changes to the Productivity Employment Programme at CTAL Sydney).

Variations between enterprise agreements

Most provisions in the enterprise agreements at different workplaces are remarkably similar. However, a small number of provisions vary between agreements, both within and between companies (see table J.3 for comparisons between workplaces).

Variations between workplaces within companies

Within companies, most provisions relating to the work arrangements examined are identical or similar between workplaces. Workplaces within Patrick and those within P&O Ports, for example, have identical or similar provisions relating to manning scales for equipment, notification, order of engagement[4] and redundancy (table J.3).

However, provisions vary between workplaces in several instances, even within the same company.

- Across workplaces, within both P&O Ports and Patrick:
  - there are minor variations in penalty rates;
  - there are variations in remuneration systems: for example, CTAL Sydney use an 'aggregate wage' compared to a 'base plus' system used at P&O Ports Melbourne; and
  - although the base rules for rosters (such as shift length and starting time) are the same, the roster systems which have developed are different: for example, the proportion of irregular shifts and whether shifts are rostered on weekends.

[4] However, at P&O Ports Melbourne and Patrick Brisbane, surplus labour from the company's other stevedoring operations (break bulk cargo) are incorporated within the order of engagement.

- Within Patrick:
  - a team-based approach has recently been introduced at Patrick Sydney.[5] However, the concept is not in place at either Patrick Melbourne or Brisbane; and
  - there is a 25 per cent premium on rostered days off at Patrick Brisbane which does not exist at Patrick Melbourne. However, penalty rates are similar in other matters.

Variations between companies

Comments on variations within companies also apply between companies. For example, there is little or no variation between companies with provisions relating to the order of engagement, manning scales and redundancy provisions. However, provisions that do vary between companies include those relating to rostering systems, penalty rates, remuneration (Sea-Land's aggregate wage compared with Patrick's base wage plus remuneration) and the team system (Patrick Sydney).

Variations in provisions relating to enterprise arrangements, both between and within companies, will reflect the wide range of factors discussed in section J.1. Depending on the combination of factors affecting each workplace, particular variations may always exist. Workplaces with less regular throughput, for example Patrick Brisbane, are always likely to require a higher proportion of irregular shifts (other things being equal) than will a larger workplace such as Patrick Melbourne (chapter 4).

However, in other instances, a variation which exists at one point in time will not always remain so. The impact of the implementation of a new work arrangement — such as the Productivity Employment Programme scheme at CTAL Sydney, an aggregate wage at Sea-Land and, more recently, a team system at Patrick Sydney — are keenly watched by management and unions alike within the industry. If the work arrangement is perceived to be operating favourably at that particular workplace, a similar arrangement may be negotiated at other workplaces.

[5] The agreement is not detailed in table J.3 because this workplace is not one of the five Australian workplaces selected for examination in this study.

Comparisons between awards

The base provisions in the Stevedoring Industry Award relating to work arrangements examined in this study are compared to similar provisions in a selection of four other awards (table J.4).

The awards for comparison with stevedoring were selected for a variety of reasons. The *Transport Workers Award 1983* and *Storage Services — General — Interim Award 1996*, which provides federal cover for storemen and packers, were selected because they relate to the movement of containers and involve some similar functions and tasks to stevedoring.[6]

The *Metal Industry Award 1984* has also been included for comparative purposes. This award has been used in the past as a model award, including for the stevedoring industry. It continues to be used in test case applications for safety net adjustments to awards. This award was recently rewritten as part of the award simplification process, and was renamed the Metal Engineering and Associated Industries Award.

The *National Building and Construction Industry Award 1990* is the key federal award for the building and construction industry. As for stevedoring, a feature of the industry is variable demand. Some of the tasks, such as driving cranes and other heavy equipment, are similar to stevedoring. This industry was included as one of the comparative industries by the Inter-State Commission (ISC 1989a).

There are clearly significant differences between the building and construction and stevedoring industries — for example, unlike stevedoring, building and construction firms do not keep workers on the payroll during troughs (that is, between construction jobs) — but this industry has been cited by participants as the most suitable comparison with stevedoring.

A selection of provisions specified in table J.4 have been presented in a simplified format in table J.2 for comparative purposes. It is evident that many of the provisions do not vary substantially across these four awards, but that many do vary significantly from the Stevedoring Industry Award.

Many of the base provisions in the Stevedoring Industry Award relating to work arrangements examined in this study — for example, those relating to remuneration — exceed those for the four other awards. However, several provisions are similar — for example, the level of sick leave.

---

[6] Comparisons with this award were particularly valid in the past when stevedores extensively used forklifts, but the advent of quay cranes, straddle carriers and rubber-tyred gantries, makes comparisons today somewhat less relevant.

Comparisons between awards across industries should be interpreted with caution because:

- the industries in which the awards operate are not, by nature, comparable in many respects. Without an understanding of the particular industry and its features, it is difficult to conclude that a particular provision is more or less favourable in one industry than another. Both continuous and noncontinuous work shifts, for example, are used in stevedoring. However, this is not a feature of many other industries;
- moreover, without this industry understanding, comparing individual provisions may be less meaningful when important links go unrecognised. The link between stevedoring's shift premiums, penalty rates and the order of engagement, for example, may have parallels in other industries but only a detailed analysis would reveal these parallels;
- numerous variations in the details of provisions means that direct comparisons between awards are not straightforward. Comparisons of penalty rates and shift premiums, for example, are complicated by the fact that under the Stevedoring Industry Award, penalties at ordinary time rates are added to the shift premium to give an overtime rate for public holidays. However, under the Storage Services — General — Interim Award, a flat rate of overtime is specified for public holidays (table J.4); and
- provisions in an award may not always reflect work arrangements at particular workplaces because they may be overridden by different arrangements negotiated in agreements at the workplace and by 'on-site' practices. Redundancy provisions, for example, are higher in agreements than under awards (excepting stevedoring) (table J.3).

Table J.2: Illustrative comparison of selected award provisions (stevedoring and other awards)[a]

Award provision	*Stevedoring Industry Award 1991*	*National Building and Construction Industry Award 1990*	*Transport Workers Award 1983*	*Storage Services General Interim Award 1990*	*Metal Industry Award 1984*
Annual leave	5 weeks	4 weeks	4 weeks	4 weeks	4 weeks
Annual leave loading	27.5 per cent	17.5 per cent	17.5 per cent	17.5 per cent	17.5 per cent
Sick leave after first year	10 days per year, cumulative	10 days per year, cumulative	8 days per year, not cumulative	10 days cumulative	8 days per year, not cumulative
Long service leave	no award provision, 13 weeks for 15 years (another award[b])	no award provision[c]	no award provision[c]	no award provision[c]	no award provision, 13 weeks for 15 years (another award[d])
Long service leave loading	no award provision, 27.5 per cent (another award[b])	no award provision, no loading[e]	no award provision, no loading[e]	no award provision, no loading[e]	no award provision, no loading[e]
Public holidays (total per year)[f]	NSW 11 Victoria 12	NSW 10 Victoria 10	NSW 10 Victoria 11	NSW 11 Victoria 11	NSW 11 Victoria 11
Shift premiums[g] (multiples of ordinary time)	weekday: day 1 evening 1.5 night 2 Sat: 2.5 Sun: 2.5	weekday day 1 evening 1.5 night 1.5 Sat: no provision Sun: no provision	weekday: day 1 evening 1.175 night 1.3 Sat: 1.5 Sun: 2	weekday: day 1[h] Sun: 2	weekday: day 1 evening 1.15 night 1.5 Sat: 1.5 Sun: no provision
Voluntary redundancy entitlements	no award provision; maximum 148 weeks payment for employee aged over 58 years[i]	maximum 8 weeks for 4 years or more service[j]	maximum 8 weeks for 4 years or more service[j]	maximum 8 weeks for 4 years or more service[j]	maximum 8 weeks for 4 years or more service[j]

a This table is a simplified summary of selected provisions specified in the awards, and is summarised in more detail in table J.4 and the awards. Caution should be applied when making comparisons (see main text).

b *Stevedoring Industry (Long Service Leave) Award 1992*.

c Employees under these awards are covered by various state long service leave acts. For example, employees in South Australia are entitled to 13 weeks for 10 years service under the *Long Service Leave Act (SA) 1997*. In NSW, employees are also entitled to 13 weeks for 15 years service under the *Long Service Leave Act (NSW) 1955*.

d *Metal Industry (Long Service Leave) Award 1984.*

e No leave loading in state long service leave acts or in *Metal Industry (Long Service Leave) Award 1984*.

f Numbers vary by state as a result of variations in the number of prescribed state holidays. NSW and Victoria are illustrative only. The number of public holidays may vary for other states.

g Timings of day, afternoon (evening) and night shifts can vary slightly between awards, but they are broadly comparable.

h Work undertaken outside of ordinary hours (7 am to 5.30 pm or more than eight hours in a day) is paid at 1.5 time the ordinary rate for the first two hours and then double time for the remaining hours.

i specified in retirement and redundancy agreements.

j However, agreements are generally more generous, providing for two weeks for each year of service.

Sources: Various awards; various state long service leave acts

Table J.3: Comparison of award and agreements by work arrangement

Clause	*Enterprise agreement*	*Provision*
Rostering		
Rostering arrangements		
20(c), (e), (f), (g), 21(b), (c), (j), (g), 24, 25 (a), (b), (e)	Stevedoring Industry Award[a]	'Day shift' shall mean a shift commencing between 6.00 a.m. and 9.00 a.m. 'Evening shift' shall mean a shift commencing between 1.00 p.m. and 5.00 p.m. 'Night shift' shall mean a shift commencing at or after 10.00 p.m. An employee, who by direction of the employer reports at the commencing time of the day shift but is not employed and is instructed to report back for work on the immediately following evening or night shift, shall be paid for four hours at the ordinary rate for so reporting at the commencing time of the day shift in addition to his or her weekly wage. Except in the case of emergency, an employee who has worked a night shift shall not be required to work the next succeeding evening shift and an employee who has worked a day shift shall not be required to work the next succeeding night shift. The parties acknowledge that where work requirements fluctuate such as in small ports, it may be appropriate to work 12 hour shifts. Such a shift system shall only be introduced by agreement, and shall ensure that the ordinary hours per week of weekly employees do not exceed an average of 35 hours. Twelve-hour shifts shall be inclusive of meal breaks and rest periods. An enterprise agreement between the employer and the union(s) shall contain rostering arrangements and may provide for the following: (i) five, six or seven-day shift arrangements with either irregular or regular rostering; (ii) the length of each shift provided that the ordinary hours of work shall not exceed a weekly average of 35 hours; (iii) where a seven-day continuous shift work roster is to be worked, the inclusion in the ordinary hours of work of shifts worked on holidays, as prescribed by clause 26 of this award, as well as Saturdays and Sundays, provided that payment for such shifts is in accordance with this award; (iv) provisions for the timing of meal breaks and/or rest periods; (v) provisions for the extension of shifts provided that all such extensions shall be paid at overtime rates;

(cont.)

Clause	*Enterprise agreement*	*Provision*
		(vi) notification and cancellation arrangements; (vii) staggering of shift start and finish times. No rostering arrangement shall require an employee to change shifts such that it would necessitate the working of two consecutive shifts, or to work more than one shift on any one day. Unless otherwise provided for in an enterprise agreement, an employee shall not be required to report for duty at any time earlier than nine hours after the employee ceased work on overtime, including circumstances where a double header has been worked. Employees working a seven-hour shift shall be entitled during the ordinary hours of work to a break or breaks totalling 45 minutes duration. Employees working an eight-hour shift shall be entitled during the ordinary hours of work to a break or breaks totalling 60 minutes duration. Meal breaks and rest periods shall be taken at a time and a manner agreed between the union(s) and the employer and may be staggered. Clause 24 states that employer may: (1) change those employees working day work to shift work; and/or (2) change employees working shift work to day work, provided that the employer shall give the union(s) a minimum of seven days notice of the intention to interchange between day work and shift work unless otherwise agreed. Where employees are required to interchange between day work and shift work the appropriate day work arrangements and shift work arrangements (including rostering, etc.) shall be the subject of enterprise level negotiations in accordance with the day and shift work provisions of the award.
19	Sea-Land Adelaide	Operational employees have a 15-week roster cycle and work 7.5-hour shifts on weekdays. On weekends 7-hour shifts are worked. When allocated to security function, 8-hour shifts are worked. Clause 19.5 states no working of a rostered day off will be sought during a rostered week off. Mechanics have a 15-week roster cycle and work 7.5-hour shifts on weekdays and 7-hour shifts on weekends.
21.2	CTAL Sydney	Operational employees have a 15-week roster cycle and work 7.5-hour shifts. No working of rostered days off will be sought during rostered weeks off nor the single rostered day off in weeks 3, 5 and 10. There is some rostered weekend work and opportunities to work overtime. Security officers have an 8-week roster cycle and work 8-hour shifts.

(cont.)

Clause	*Enterprise agreement*	*Provision*
3.5	P&O Ports Melbourne	Operational employees have a 15-week roster cycle and work 7.5-hour shifts. There is some rostered weekend work and opportunities to work overtime. No working of rostered days off will be sought during rostered weeks off nor on the single rostered days off in weeks 3, 6, 9, 11 and 12. Watchmen have a 25-week roster and work 8-hour shifts. There are some rostered shifts on weekends and opportunities to work overtime. Reefer attendants have an 8-week roster cycle. There is some rostered weekend work and opportunities to work overtime. Allocators have a 15-week roster and work 7.5-hour shifts. There is some rostered weekend work and opportunities for overtime. Storemen have a 15-week roster and work 7.5-hour shifts. There are no rostered weekends but opportunities for overtime. Gear foremen have a 15-week roster cycle and work 7.5-hour shifts. All are regular day shifts. There are no rostered weekend shifts but opportunities for overtime. Machinery washmen have a 15-week roster and work 7.5-hour shifts. There is some rostered weekend work and opportunities for overtime.
28, schedule 13	Patrick Melbourne	Operational employees have a 30-week roster cycle and work 7.5-hour shifts. There are some rostered weekends and opportunities for overtime. Employees are not be permitted to work during rostered weeks off. Technical service employees have a 15-week roster cycle and work 7.5-hour shifts. There is some rostered weekend work and opportunity for overtime. Ancillary employees have a 15-week roster and work 7.5-hour shifts. There are no regularly rostered shifts. Other employees such as gatekeepers have a 200-day roster cycle and work 8-hour shifts. There are some rostered weekend shifts and opportunities for overtime.
27, schedule 2, 11, 12, 13, 14	Patrick Brisbane	Operational employees have an 8-week roster cycle Monday to Friday with one week rostered off and work 8-hour shifts. Weekends are worked as voluntary overtime and shift length is 7 hours. Operational employees are not permitted to work during rostered weeks off. Maintenance employees have an 8-week cycle and work 8-hour shifts on weekdays. Weekends are worked as voluntary overtime and shift length is 7 hours. Ancillary staff have an 8-week cycle and work 8-hour shifts on weekdays. Weekends are worked as voluntary overtime and shift length is 7 hours. Gatekeepers have a 16-week roster, work 8-hour shifts with no full weeks rostered off. There is one rostered overtime shift every four weeks.

(cont.)

Clause	*Enterprise agreement*	*Provision*
Order of engagement		
–	Stevedoring Industry Award[a]	No provision
17	Sea-Land Adelaide	Similar provisions to Patrick Melbourne
18.1	CTAL Sydney	While clause 18.1 under the CTAL enterprise agreement specifies an order of engagement, CTAL Sydney have a new order of engagement which overrides this and is not registered with the AIRC. It allows supplementaries to be engaged before permanent employees working double headers.
3.2	P&O Ports Melbourne	Similar provisions to Patrick Melbourne. However, surplus labour from the company's other stevedoring operations (for example, general cargo) are incorporated within the order of engagement at each stage.
28	Patrick Melbourne	On weekdays employees are engaged in the following order: 1. regular rostered workers; 2. irregular rostered workers; 3. guaranteed wage employees (two shifts); 4. permanent double headers (maximum of two non-consecutive); 5. guaranteed wage employees over guarantee of two shifts; and 6. supplementaries. On weekends, employees on rostered days off generally have an opportunity to work before double headers are worked (that is, between categories 2 and 3 on the above weekday order of engagement).
27	Patrick Brisbane	Similar provisions to Patrick Melbourne. However, surplus labour from the company's other stevedoring operations, (for example, general cargo) are incorporated within the above order of engagement at each stage. All work on weekends is performed as voluntary overtime.

(cont.)

Clause	*Enterprise agreement*	*Provision*
Double headers (excluding penalty rates)		
23	Stevedoring Industry Award[a]	Where an employee is working shift work, and provided that there is no suitable relief available, the employee may work two consecutive shifts (a double header). No employee shall be required to work more than two double headers in any week. Double headers shall not be worked on consecutive days.
22	Sea-Land Adelaide	An employee required to work a double header shall be notified as soon as possible, and confirmed by the meal break on the first shift worked unless exceptional circumstances make this impossible. In addition, an employee shall not be required to work a double header provided there is another suitably qualified employee available who is willing to work the double header. An employee shall not be required to work more than two double headers against their will in any one full week or to work double headers on two consecutive days in any one week. An employee may elect to receive a day off in lieu of a penalty payment for the second double header worked in any week. An employee so electing may accrue up to five such days in the year and any days accrued up to the maximum shall be taken with the immediate next annual leave period unless mutually agreed otherwise.
23.2	CTAL Sydney	Same as P&O Ports Melbourne
3.7.2	P&O Ports Melbourne	Double headers to be confirmed by 12.15 p.m. and by no later than the end of day shift on the day. On 1 July each year, an employee may elect to receive a day off in lieu of a penalty payment for the second double header worked in any week. An employee so electing may accrue up to five such days in the year and any days accrued up to the maximum shall be taken with the immediate next annual leave period unless mutually agreed otherwise. After consultation between the firm and employees, the firm may seek employees to work additional or consecutive double headers to meet operational and skill requirements.
29	Patrick Melbourne	Double headers, from day to evening shift, shall be worked by employees as required and shall be voluntary subject to a guarantee of sufficient suitably qualified and accessible labour being available to perform the necessary work. Double headers on any day shall be confirmed by 12 noon and once confirmed shall not be cancelled. In respect of the one-hour break between the day and evening shifts of a double header, the company may elect to cover the break in the following order: (1) stop wholly or partially for the one-hour break; (2) provide meal relief of one hour; (3) work through with employees allocated to double headers who shall be paid the appropriate penalty rate in

(cont.)

Clause	*Enterprise agreement*	*Provision*
		accordance with the Stevedoring Industry Award. With the exception of the 30 minutes available to start shifts early or complete work on a shift, employees working double headers shall not work extended shifts in any circumstance.
28	Patrick Brisbane	Similar provisions to Patrick Melbourne
Earnings equalisation scheme		
–	Stevedoring Industry Award[a]	No provision
–	Sea-Land Adelaide	No specific clause. However, aggregate wage operates and employee work hours are monitored.
25	CTAL Sydney	The parties agree to provide work opportunity for each employee within each group of category of identically skilled employees so as to achieve general equity of earnings at the conclusion of each four-week period of the roster.
3.2.3	P&O Ports Melbourne	West Swanson Container Division shall provide general equity of work opportunities among permanent employees of the same category and skill level over the financial year.
28	Patrick Melbourne	Equalisation and allocation arrangements including overtime/double headers shall be conducted within functional categories and not across a grade or between grades. Equalisation of earning opportunities shall be attempted to the extent possible over a 15-week period. This involves a points equalisation system where employees are given points according to shifts worked. A tolerable range of 30 points 'either side' shall apply and all employees shall commence the enterprise agreements with zero points. Equalisation systems shall not apply to the placement of employees to locations, jobs or functions.
27	Patrick Brisbane	Equalisation and allocation arrangements including overtime/double headers shall be conducted within functional categories and not across a grade or between grades. Equalisation of earning opportunities within functional categories shall be attempted to the extent possible, but the company has the right to operate outside the

(cont.)

Clause	*Enterprise agreement*	*Provision*
		equalisation scheme after union consultation. Equalisation systems shall not apply to placement of employees to locations, jobs or functions.
Notification of work		
–	Stevedoring Industry Award[a]	No provision
20	Sea-Land Adelaide	Any employee may be notified of his/her next shift for the following day by either being advised before the end of the day or evening shift being worked or as soon as practical by telephoning after 4.30 p.m. Such orders may require an employee to telephone between 9 a.m. and 11 a.m. the following day for possible allocation to the next afternoon or midnight shift.
22	CTAL Sydney	Detailed notification times and procedures are contained in clause 22. For example, every effort shall be made to notify regular and irregular rostered employees working on day shift Monday to Thursday of their allocation for the following day by no later than 12.15 p.m. that day. Also, regular rostered employees working on evening shift Monday to Thursday shall be notified by no later than 2.30 p.m. that day as to whether a requirement exists for them to work evening shift on the following day. In terms of weekends and holidays, employees shall be notified no later than 12.15 p.m. Friday of their allocation or otherwise to weekend shifts (including Sunday midnight shift and Monday and Tuesday public holidays).
3.6.1	P&O Ports Melbourne	P&O Ports Melbourne have similar notification provisions to CTAL Sydney. For example, clause 3.6.1 states every effort shall be made to notify regular and irregular rostered employees working on day shift Monday to Thursday of their allocation for the following day generally by 12.45 p.m. and no later than the end of the shift, subject to appropriate communication between the firm and the local MUA officers.
28	Patrick Melbourne	Orders will be posted on the job by the end of day shift, where practicable, for the following day, evening and midnight shifts Monday to Thursday and, where practicable, by the end of day shift on Friday for all weekend shifts and first shift Monday.

(cont.)

Clause	*Enterprise agreement*	*Provision*
27	Patrick Brisbane	Orders will be posted on the job by the end of the day shift, where practicable, for the following day, evening and midnight shifts Monday to Friday and, where practicable, by the end of day shift on Friday for all weekend shifts and first shift Monday. Where orders are unable to be posted by the end of the shift, employees shall ring the tape recording after 5 p.m., including Sundays, or at a later time in unforeseen circumstances following consultation with the union.
Manning		
Manning scale		
–	Stevedoring Industry Award[a]	No specific manning scales
9	Sea-Land Adelaide	Container cranes will be manned on the basis of two men for one quay crane. Straddles and heavy forklifts will be manned by three men for two machines or five men for three machines. The number of employees required for lashing/unlashing shall be in accordance with real operational requirements.
9	CTAL Sydney	Quay cranes will be manned on the basis of two men for one quay crane. All other heavy equipment will be manned by three men for two machines or five men for three machines.
3.1, annexure 3.7	P&O Ports Melbourne	Quay cranes will be manned on the basis of two men for one quay crane. Straddles and heavy forklifts will be manned by three men for two machines or five men for three machines. Clause 3.1 also discusses manning for ancillary activities. Annexure 3.7 provides examples of manning practices.
23, schedule 8	Patrick Melbourne	Fixed manning levels shall not apply. However, indicative levels which can be varied are specified in schedule 8. Wharf cranes will be manned on the basis of two employees for one wharf crane. Straddle carriers, heavy forklifts and the rail gantry crane operations will be collectively manned in each area three men for two machines or five men for three machines. Lashing duties will be performed by a minimum of three employees under the general supervision of the foreman of the vessel being lashed. Other manning arrangements are detailed in schedule 8.

(cont.)

Clause	*Enterprise agreement*	*Provision*
23, schedule 8, examples	Patrick Brisbane	Fixed manning levels shall not apply. Indicative manning scales are contained in schedule 8. Manning levels may be varied from time to time to reflect changes consistent with safe work practices, improved technology and new types of machinery or systems, and to reach the levels of productivity required by the company. Schedule 8 states that quay cranes will be manned on the basis of two men for one quay crane. Straddle carriers and heavy forklifts will be collectively manned by three men for two machines or five men for three machines. Lashing will be performed by all gang members except for the down crane driver.
Workforce size and composition		
–	Stevedoring Industry Award[a]	No direct provision
10, 15, 16	Sea-Land Adelaide	The number and grades/classification of personnel at the commencement of the enterprise agreement is specified. Fourteen guaranteed wage employees are to be recruited after the commencement of the agreement.
10, 14, 17	CTAL Sydney	The requirement for employees by grade at the commencement of the enterprise agreement is specified. Fifteen guaranteed wage employees are to be recruited after the agreement commences.
annexure 1.1, 3.3	P&O Ports Melbourne	The establishment of labour (size, composition and grades of the workforce) is set out in annexure 3.3. Nine guaranteed wage employees are to be recruited after the agreement commences.
24, 25, 26 schedule 9	Patrick Melbourne	The agreement will commence with the number of employees and grading set out in schedule 9. A formal review of permanent and supplementary employees will take place six months after the commencement of the agreement. Ten guaranteed wage employees and 20 supplementaries are to be initially recruited.
24, 25, 26 schedule 9	Patrick Brisbane	The agreement will commence with the number of employees and grading set out in schedule 9. Six guaranteed wage employees and 12 supplementaries are to be initially recruited.

(cont.)

Clause	*Enterprise agreement*	*Provision*
Security of employment		
–	Stevedoring Industry Award[a]	No provision
10	Sea-Land Adelaide	Upon full implementation of the agreement [Sea-Land] shall employ the following personnel in the grades/classifications listed. The levels of employment will be monitored continually and adjustments shall be made from time to time.
10	CTAL Sydney	Stores numbers to decrease with the introduction of new technology.
–	P&O Ports Melbourne	No provision
8	Patrick Melbourne	In recognition of the intent of the agreement, the company will provide security of employment for permanent employees throughout the term of the agreement. It is agreed to review the agreement and/or the size and composition of the workforce in the event of any loss of business or facilities or through the introduction of change in accordance with clause 43 of the award. Reductions in the size of the permanent workforce shall be processed in accordance with the Retirement and Redundancy Agreement (including redeployment arrangements) or the Voluntary Early Retirement Scheme contained in schedule 3, and through discussions with the unions and employees.
8	Patrick Brisbane	Includes similar provisions to Patrick Melbourne with several additions. For the purposes of any reduction in the permanent workforce at Fisherman Islands, voluntary redundancies are sought by skill in accordance with the Retirement and Redundancy Agreement. Such voluntary redundancies will initially be sought from the Fisherman Islands workforce. In the event that insufficient volunteers in the required skill group(s) are forthcoming, the parties shall confer on appropriate options, which shall include redeployment and extension of the call for volunteers to other skill groups at Fisherman Islands/Maritime Wharf. All employees of both areas shall be taken to constitute a

(cont.)

Clause	*Enterprise agreement*	*Provision*
		single combined workforce. In the event of the above steps failing to secure agreed numbers, there will be no compulsory retrenchment in other than agreed circumstances.
Supplementary employment		
8	Stevedoring Industry Award[a]	A supplementary employee is one engaged and paid as such. A supplementary employee for working ordinary time shall be paid per hour 1/35 of the weekly award wage for the work which he or she performs, including the district allowance where relevant, plus 20 per cent.
16	Sea-Land Adelaide	The use of supplementaries in different functions as required is specified.
17	CTAL Sydney	Same as P&O Ports Melbourne
1.13	P&O Ports Melbourne	A supplementary workforce shall operate as an independent nonpermanent workforce. Supplementary employees shall be trained and paid in accordance with the work they perform. Supplementary employees shall be contacted by the firm at nominated times to determine if a requirement for work exists. Clause 1.13.7 allows the firm to allocate (and redeploy) supplementaries. It states supplementary employees shall contact the firm at agreed nominated times for possible allocation purposes and where a requirement for work is known, the firm shall contact supplementary employees as necessary.
26	Patrick Melbourne	The firm may deploy and redeploy supplementaries as necessary. All supplementary employees shall not be subject to equalisation or rostering arrangements and shall be allocated daily on an irregular basis to any shift as required by the company.
26	Patrick Brisbane	Similar provisions to Patrick Melbourne. Supplementary employees may be required to work overtime shifts on weekends/public holidays or to work meal reliefs and shift extensions.

(cont.)

Clause	*Enterprise agreement*	*Provision*
Performance of tasks		
9	Stevedoring Industry Award[a]	An employer may require an employee to perform any function or duty for which the employee is skilled or qualified in accordance with his or her classification.
9	Sea-Land Adelaide	Sea-Land may place and move employees between functions and tasks. Employees are required to be available for and to carry out during the course of a shift, any function and mix of functions for which they are qualified in accordance with operational needs and the classification structure in the Stevedoring Industry Award. In the event that an employee is unable to continue to perform those functions within his classification level as a result of a disability then retraining or redeployment will be examined based on each circumstance and the provisions of the award. There are various alternative duties that employees can be redeployed to in the course of a shift. For example, employees allocated to wash duties, will perform any other function they are trained to do, if and when required.
9, 17	CTAL Sydney	Similar provisions to P&O Ports Melbourne in terms of employees being available for other duties and supplementaries being deployed on a needs basis.
3.1.4, 3.1.14, 3.2.4	P&O Ports Melbourne	Employees must be available to carry out a mix of functions for which they are qualified in accordance with operational needs. Clause 3.1.14 allows available labour to be shifted to road receival and delivery duties when required. Clause 3.2.4 allows an interlocation transfer of employees. Employees of the container division may volunteer to be placed on a list of transferees. All such employees, when otherwise on idle time, will be offered to the bulk and general stevedoring division for work in that division, if required, subject to holding the appropriate skills. When such employees accept engagement under this arrangement, they shall work at the bulk and general stevedoring division in accordance with part 2 of the enterprise agreement. When working on transfer, unless engaged for a higher grade for which they are qualified, they shall be paid at their substantive grade for any work they perform including shift premiums and overtime.
22	Patrick Melbourne	The firm retains the right to determine the placement of employees to particular functions on an individual basis at the start of and throughout the course of any shift. An employee shall perform such work as the company shall

(cont.)

Clause	*Enterprise agreement*	*Provision*
		reasonably require, from time to time, including transfer between and within facilities and work areas. Volunteers sought for interstate transfers shall be covered, while on transfer, by arrangements concluded and agreed on a local basis from time to time.
22	Patrick Brisbane	Similar provisions to Patrick Melbourne
Recruitment, redundancy and contracting		
Recruitment		
16	Stevedoring Industry Award[a, b]	In the first instance, preference to new employees will be given to union members surplus to the requirements of the industry and secondly to persons who agree to become members of the union upon commencement of employment.
11,14,15	Sea-Land Adelaide	Preference of engagement provisions apply in accordance with the award. Clause 14 states the firm shall recruit eight Australian vocational trainees such as trainees under the terms of the Australian Vocational Training Scheme. Clause 15 states the firm shall recruit 14 guaranteed wage employees as soon as possible after the commencement of the agreement.
11,13	CTAL Sydney	Preference of engagement provisions will apply in accordance with the award. The order of preference for further recruits shall be: (1) subject to State Training Authority, trainees employed under the AVC training scheme; (2) existing employees engaged under the guaranteed wage system; (3) supplementary employees; and (4) external applicants. Clause 13 states that the company shall recruit 10 Australian vocational trainees as soon as possible after the commencement of the enterprise agreement.
1.8, 1.11, 1.12	P&O Ports Melbourne	Preference of engagement provisions will apply in accordance with the award. If any vacancies are not filled internally, Conaust will hire applicants according to the following preference order: (1) trainees employed by the firm under the Australian Vocational Training Scheme; (2) existing employees engaged by the firm under the guaranteed wage system; (3) supplementary employees within the firm; and (4) external applicants. Clause 1.11 states that the firm shall recruit some Australian vocational trainees with numbers to be decided. Clause 1.12 states

(cont.)

Clause	*Enterprise agreement*	*Provision*
		that some guaranteed wage employees shall be recruited with numbers to be decided.
25, 27	Patrick Melbourne	No recruitment provisions specified. Patrick shall recruit 10 guaranteed wage employees as soon as possible after the commencement of the enterprise agreement. Clause 27 states that three trainees will be employed by 1 February 1997.
25	Patrick Brisbane	No recruitment provisions specified. Clause 25 states Patrick shall recruit six guaranteed wage employees and one trainee employee after the commencement of the enterprise agreement.
Redeployment		
8(g), 16, 48	Stevedoring Industry Award[a]	An employee who has been temporarily allocated or transferred by the employee's usual employer to work for another employer under the Stevedoring Industry Award shall accept and carry out the instructions of the employer to which the employee has been allocated or transferred. The first mentioned employer shall at all times be responsible for ensuring that the employee receives his or her correct wages and other allowances and any other payments for which the first mentioned employer is liable. Clause 16 states preference of engagement shall be given to members of the union(s) who are surplus to the industry, including redundant employees. Clause 48 states that an employee may be required to work in an outport but such requirement shall be subject to the terms and conditions for such transfer as may be contained in an enterprise agreement. The employer must pay accommodation, meal and travel allowances for such work.
annexure 9	Sea-Land Adelaide	All vacancies covered by enterprise agreements within Sea-Land shall be offered firstly to their own employees seeking redeployment from another location/port to that vacant position.
Retirement and Redundancy Agreement	CTAL Sydney	Vacancies covered by the enterprise agreement shall be offered to suitable Conaust/CTAL employees seeking redeployment from another location/port to that vacant position.
Retirement and Redundancy	P&O Ports Melbourne	Similar provisions as CTAL Sydney

(cont.)

Clause	*Enterprise agreement*	*Provision*
Agreement		
schedule 3	Patrick Melbourne	Any vacancies shall firstly be offered to suitable Patrick employees seeking redeployment from another location/port to that vacant position. Schedule 3 states that in circumstances where a Patrick employee who is surplus in one port and is accepted by Patrick for employment in another port, the company shall pay the employee in regard to travel expenses. For full-time union officials (names listed), Patrick will take the first person available wishing to be re-employed, and thereafter every alternative person except for those unfit.
22, 26, schedule 3	Patrick Brisbane	Similar provisions to Patrick Melbourne
Redundancy		
–	Stevedoring Industry Award[a]	No provision
annexure 9	Sea-Land Adelaide	Annexure 9 provides a Retirement and Redundancy Agreement. It states that upon the declaration of a redundancy situation by the company, volunteers for retirement/redundancy shall be sought from employees in the redundant positions in the following order: (1) for employees aged 58 years or more with 15 years or more service, the entitlement shall be 57% of the remaining weeks to age 65 years with a maximum entitlement of 148 weeks at the award rate; (2) for employees aged 45 years or more with eight years or more service, the entitlement shall be 50% of the remaining weeks to age 65 with a maximum entitlement of 130 weeks payment at the award rate; (3) for employees aged 35 years or more with four years or more service the entitlement shall be 45% of the remaining weeks to age 65 years with a maximum entitlement of 104 weeks payment at the award rate; and (4) for employees aged under 35 years or for other employees with less than four years service, the entitlement shall be 40% of the remaining weeks to age 65 years with a maximum entitlement of 78 weeks payment at the award rate. The enterprise agreement also states that where sufficient volunteers are not forthcoming, the companies, unions and employees shall confer with the companies in exercising any intended necessary retrenchments. It states that where a redundancy situation occurs, volunteers for retirement/redundancy shall be sought before retrenchments occur.

(cont.)

Clause	*Enterprise agreement*	*Provision*
Retirement and Redundancy Agreement	CTAL Sydney	Similar provisions to Sea-Land
Retirement and Redundancy Agreement	P&O Ports Melbourne	Similar provisions to Sea-Land
schedule 3	Patrick Melbourne	Similar provisions to Sea-Land
schedule 3	Patrick Brisbane	Similar provisions to Sea-Land
Contracting		
–	Stevedoring Industry Award[a]	No provisions
9y, 9za(8)	Sea-Land Adelaide	The firm can seek the use of a contractor who will provide hire cranes (without driver) for operation by suitably trained Sea-Land employees. In addition, more highly sophisticated equipment may be contracted in with driver. Sea-Land is willing to train employees in that regard if it is achievable with consultation with the union. Clause 9za(8) states all existing line marking needing renewal and all new line marking will be carried out by a Sea-Land contractor, assisted by Sea-Land employees as required.
9	CTAL Sydney	CTAL shall seek the use of a contractor who will provide hire cranes without driver for operation by a suitably trained CTAL employee. More highly sophisticated equipment may be contracted in with driver. CTAL is willing,

(cont.)

Clause	*Enterprise agreement*	*Provision*
		in the longer term, to train CTAL employees in that regard.
3.8.14	P&O Ports Melbourne	The employer ensures that the enterprise agreement reached as to the number of permanent tradesmen and their conditions of employment will not be diminished by the use of contract labour. The use of such contracting for the repair and maintenance of terminal equipment and facilities is not designed to replace permanent employees. Contracting out of maintenance will occur when: the equipment or technological skills are not available within the terminal to perform the required task and/or there is a heavy workload beyond normal capacity; equipment is under warranty; and repairs and maintenance associated with buildings, fencing, paving and other facilities not currently performed by maintenance employees is required.
schedule 2	Patrick Melbourne	The enterprise agreement allows the additional services of contractors to be used on occasions to meet the needs of the maintenance programme. However, the employment of contractors should not be to the detriment of the employment of the company's employees with regard to numbers.
schedule 2	Patrick Brisbane	Contractors may, after discussions with the workshop delegates, be used when: equipment or skills are not available to perform the required task; or a heavy short term work load arises which is beyond the normal capacity of the maintenance garage or which would adversely affect the terminal operations; or equipment is under warranty. Some contracting out of repairs and maintenance of buildings, fences and paving is allowed.
Remuneration		
Base wage rates		
13	Stevedoring Industry Award[a]	The award prescribes weekly base rates of pay for stevedoring employees based on a skill-based classification structure. There are eight employee grades in the award (one is not defined).
40a, 41a, annexure 8	Sea-Land Adelaide	Employees shall be paid wages in accordance with the principles of the aggregate wage. Clause 41 states that the aggregate wage is based on the award base rates. The enterprise agreement adjusts the base rates specified in the award for inflation and other factors. Annexure 8 states the aggregate wage includes all award-nominated rates

(cont.)

Clause	*Enterprise agreement*	*Provision*
		which cover base rate, overtime, public holidays, shift penalties, consolidated allowances, meal monies, annual leave and loading and productivity scheme payments. The aggregate wage is based on 1596 ordinary shift hours and 1227.5 premium shift hours for a total of 2823.5 hours.
35, PEP	CTAL Sydney	Adjusted base wage rates consistent with those set out in the award. The Productivity Enhancement Programme provides for a productivity-based aggregate wage.
1.14	P&O Ports Melbourne	Adjusted base wage rates consistent with those set out in the award.
18	Patrick Melbourne	The base rates (adjusted for inflation) in the award apply.
18	Patrick Brisbane	Same as Patrick Melbourne.
Shift premiums		
20(d)	Stevedoring Industry Award[a]	Sunday night to Friday night = ordinary time for day; 1.5 times ordinary rate for evening; two times ordinary rate for night. Friday night = two times ordinary rate. Saturday day = two times ordinary rate. Saturday evening = 2.5 times ordinary rate. Saturday night = 2.5 times ordinary rate. Sunday day = 2.5 times ordinary rate. Sunday evening = 2.5 times ordinary rate.
–	Sea-Land Adelaide	Uses aggregate wage
PEP	CTAL Sydney	Uses aggregate wage
–	P&O Ports Melbourne	No provision outside the award
28	Patrick Melbourne	Double time for Saturday day and evening; 2.5 times for Sunday day and evening.

(cont.)

Clause	*Enterprise agreement*	*Provision*
27	Patrick Brisbane	Work during holiday incurs 2.5 times the ordinary rate and midnight shift on a holiday incurs three times the ordinary rate.
Penalty rates		
22, 23	Stevedoring Industry Award[a]	Penalties apply to shift extensions, double headers, voluntary overtime on rostered days off and work on holidays. Shift work: continuous with usual shift = the ordinary rate in addition to the rate appropriate for the shift to be worked; noncontinuous with usual shift = twice the ordinary rate for Monday to Saturday, 2.5 times the ordinary rate on a Sunday and on the day and evening shift on a public holiday, and three times the ordinary rate on the night shift on a public holiday. The first double header (double shift) worked during a week (Monday to Friday) is paid at the ordinary rate in addition to the rate appropriate to the additional shift worked. On Saturdays, Sundays, and holidays, it is paid at half the ordinary rate in addition to the rate appropriate to the additional shift worked.
–	Sea-Land Adelaide	Uses aggregate wage
23, PEP	CTAL Sydney	Under the enterprise agreement, all time worked in excess of the normal length of the shift shall be paid at the rate of ordinary time in addition to the rate for the shift just worked with a minimum payment of 1.5 hours excluding closing work. When a shift is extended by a further hour, the minimum penalty becomes 2.5 hours. Weekday double headers are paid single time in addition to the shift rate for the additional shift worked. A double header on weekends or public holiday shall be paid in addition to the shift rate for the additional shift worked, half time. The Productivity Enhancement Programme scheme includes a productivity-based aggregate wage. The average weekly wage rate under this program is calculated on the program's hourly rate (which is an increase on the existing grade hourly rate) and has been calculated on five rostered shifts per week and includes shift premiums/annual leave loadings. This means an employee receives the same average weekly rate for 52 weeks of the year, regardless whether work is performed on day, evening or midnight shifts.
3.7.1, 3.7.2	P&O Ports Melbourne	Shift extensions shall be paid at the ordinary rate of time in addition to the rate for the shift being extended. Double headers on a weekday are paid at ordinary time in addition to the shift rate for the additional shift worked. Double

(cont.)

Clause	*Enterprise agreement*	*Provision*
		headers on weekends and public holidays shall be paid at half the ordinary rate in addition to the shift rate for the additional shift so worked.
28, 29	Patrick Melbourne	All overtime/double headers shall be paid for at 7.5 hours at the appropriate overtime rate (for example: Saturday, overtime shift, 7.5 hours at double time = 15 hours ordinary pay).
27	Patrick Brisbane	All weekly double headers are paid at 2.5 times the ordinary rate. Weekend overtime/double headers are paid at the appropriate overtime rate.
Allowances		
14(a), (b), (c), (d), (f), (g), (h)	Stevedoring Industry Award[a]	Clause 14(a) provides a laundry or drycleaning allowance of $6.95 per week per employee. Clause 14(b) provides a telephone allowance of $6.40 per week in the case where employees are required to telephone for their labour allocation. Clause 14(c) specifies a consolidated disability allowance which varies between grades. This allowance is compensation for such factors as conditions which are unusually dirty, confined spaces, height, noise or heavy lifting. Clause 14(d) describes disabilities covered by the consolidated allowance. Other clauses refer to allowances which cover rates for different types of cargo, work on roll-on/roll-off vessels and first aid.
39	Sea-Land Adelaide	An annual allowance of $4330 shall be part of the aggregate wage with any future adjustments being consistent to changes to the aggregate wage.
36	CTAL Sydney	Same allowance amount as P&O Ports Melbourne
3.9	P&O Ports Melbourne	An annual allowance of $4500 per year shall be paid to all eligible employees on a weekly basis. Adjusted for movements in the CPI.
19	Patrick Melbourne	An annual allowance of $5288 per year shall be paid to all permanent employees of the company on a weekly basis. Adjusted for movements in the CPI.
19	Patrick Brisbane	An annual allowance of $6600 per year shall be paid to all permanent employees on a weekly or yearly basis. Adjusted for movements in the CPI.

(cont.)

Clause	*Enterprise agreement*	*Provision*
Productivity bonus schemes		
50	Stevedoring Industry Award[a]	Productivity incentive schemes and any related payments, may form part of an enterprise agreement.[c]
annexures 2 and 8	Sea-Land Adelaide	The performance-related productivity scheme is based on a threshold number of lifts handled per crane hour as calculated per vessel. The minimum (threshold) performance rate for any bonus to be paid is 20 lifts per crane hour, labour on to labour off each vessel. The bonus pool is included in the aggregate wage. The productivity payment ($5000 per year) is paid as part of the aggregate wage and is on the basis that targets will continue to be achieved.
annexure 4 and PEP	CTAL Sydney	Annexure 4 of the CTAL enterprise agreement outlines a productivity scheme. A bonus pool is distributed among employees on a weekly basis. However, this was replaced by the Productivity Enhancement Programme designed to reward employees for increased performance. The scheme included a receival and delivery component as well as a vessel operations component. The scheme no longer operates as a whole.
annexure 3.4	P&O Ports Melbourne	The bonus scheme operates on ship working and receival and delivery. The total bonus is made up of the sum of the calculated ship and road bonuses above certain levels. The total pool is split among all employees, other than those on Workcare leave, each week of the year, and is paid each week.
schedule 7	Patrick Melbourne	The scheme shall operate on a weekly basis covering all shifts worked from first shift Monday to twilight shift Sunday inclusive. The scheme relies on the achievement of required productivity targets in ship working and receival/delivery, each of which is treated separately. The ship working assessment is based on a threshold number of revenue earning lifts being handled per working hour. A receival and delivery bonus is paid for all containers received or delivered provided a minimum average number of containers per machine employed is achieved. The rate of bonus is $5 for each container movement. Payments earned under the scheme form part of a total weekly bonus pool which is then distributed among all permanent and entitled supplementary employees. All permanent

(cont.)

Clause	*Enterprise agreement*	*Provision*
		employees each week shall receive an equal share of the bonus irrespective of whether they performed work in the week.
schedule 7	Patrick Brisbane	The scheme shall operate on a weekly basis covering all shifts worked. The scheme relies on the achievement of required productivity targets in ship working (inclusive of lashing/unlashing). The dollar rate per lift payable is based on the average lift rate achieved over the whole of the assessment period and will be paid for every revenue lift carried out during that period. Payments earned under the scheme form part of a total weekly bonus pool which is then distributed among all permanents, guaranteed wage employees and entitled supplementary employees. All permanent employees each week shall receive an equal share of the bonus irrespective of whether they performed work in the week.
Superannuation		
–	Stevedoring Industry Award[a]	No provision
40(c)	Sea-Land Adelaide	Sea-Land shall maintain a superannuation scheme of which all employees may be members. Employees who belong to the Stevedoring Employees Retirement Fund may continue to do so. New employees shall have the right to join either fund.
35	CTAL Sydney	The firm shall maintain a superannuation scheme of which all employees may be members. Employees who belong to the Stevedoring Employees Retirement Fund may continue to do so. New employees shall have the right to join either fund.
1.14.4	P&O Ports Melbourne	Similar provisions to Sea-Land
18	Patrick Melbourne	Certain employees who were previously remunerated on a salary structure with superannuation contributions based on salaries, and who will convert to the award wage and overtime calculation system applicable to all other employees, shall continue to have superannuation contributions calculated at the former rate, as indexed in

(cont.)

Clause	*Enterprise agreement*	*Provision*
		accordance with the percentage movement for wages agreed on 31 January 1995.
–	Patrick Brisbane	No provision for superannuation
Paid non-working time		
Minimum call-up payments		
20, 22	Stevedoring Industry Award[a]	Supplementary employees: minimum payment of one shift for any day the employee is required to work. Day shift: employee that reports for day shift but is reallocated to evening/night shift shall be paid for four hours at the ordinary rate. Evening/Night shift: employees that report for work at the commencement of either shift shall be paid the shift premium for the full shift. Weekend/holiday: employees that report to work on one of these days shall be paid for a minimum of seven hours at the appropriate rate. Clause 22 states an employee required to do preparatory work shall be paid a minimum of 30 minutes at the appropriate overtime rate. Also, when a stevedoring employee grade 7 is required to be present at, or liaise with, a pickup centre to implement labour orders outside his or her ordinary shift hours, he or she shall be paid a minimum payment of four hours at the appropriate rate. A maintenance employee recalled to work overtime after leaving the employer's business premises (whether notified before or after leaving the premises) shall be paid for a four-hour minimum at the appropriate overtime rate for each time the employee is recalled, provided that if the call-back is for a period of over four hours and up to six hours the minimum payment shall be for six hours and if the call-back is for a period of more than six hours the minimum payment shall be for a full shift.
20	Sea-Land Adelaide	An available regular rostered evening shift employee that is not allocated to the evening shift is entitled to payment for that shift if subsequent reallocation that morning of an irregular rostered employee to that shift occurs or if a double header is performed other than for the purpose of covering for a failure to report. Employees who report to the allocation centre, and who are reallocated from the centre to either evening or midnight shift that day, shall be entitled to a reallocation payment of four hours at the ordinary time in addition to the normal payment for the evening or midnight shift worked. If not reallocated to day, evening or midnight shift that day, employees shall receive an ordinary time payment for the day.

(cont.)

Clause	*Enterprise agreement*	*Provision*
22	CTAL Sydney	Employees reallocated from the centre to either evening or midnight shift that day shall be entitled to a reallocation payment of four hours at ordinary time in addition to the normal payment for the evening or midnight shift worked. If not reallocated to day, evening or midnight shift that day, employees shall receive ordinary time payment for the day. An available regular rostered evening shift employee not allocated to the evening shift on a particular day shall be entitled to payment for that shift if subsequent reallocation that morning of an irregular rostered employee to that shift occurs or if a double header is performed other than for the purpose of covering for a failure to report. Regular rostered employees working on evening shift Monday to Thursday, if not required for the following evening shift, shall be paid ordinary time for that day. Once notified, extensions must be paid whether worked or not.
3.6	P&O Ports Melbourne	Employees reallocated to evening or night shifts on the same day shall be entitled to a reallocation payment of four hours at ordinary time in addition to the normal payment for the evening or night shift ultimately worked. If not reallocated to day, evening or night shift that day, employees shall receive ordinary time payment for the day. An available regular rostered evening shift employee not allocated to the evening shift on a particular day shall be entitled to payment for that shift if subsequent reallocation that morning of an irregular rostered employee to that shift occurs or if a double header is performed other than for the purpose of covering for a failure to report. Regular rostered employees working on evening shift Monday to Thursday shall be notified by no later than the start of the shift that day as to whether a requirement exists for them to work the evening shift on the following day. If not required for the following evening shift, employees shall be paid ordinary time for that day. In addition, once notified, a shift extension shall not be cancelled and payment shall be made whether performed or not.
28	Patrick Melbourne	Where a rostered weekend shift is cancelled, the company shall credit the employee with 7.5 hours towards payment for the rostered week off.
27	Patrick Brisbane	Regular rostered day shift employees who are not required to work that shift and who would otherwise be idle may be allocated to evening shift before double headers, guaranteed wage employees or supplementaries and shall be paid ordinary time for the non-worked day shift and time and a half for the evening shift worked.
Annual leave arrangements		
27	Stevedoring	Five weeks annual leave for shift workers for each year of continuous service with a loading of 27.5 per cent.

(cont.)

Clause	*Enterprise agreement*	*Provision*
	Industry Award[a]	Annual leave can be taken over three periods during one year, each of which can be not less than one week.
25	Sea-Land Adelaide	Annual leave is taken in accordance with the award, subject to maintaining skills to meet customer requirements.
27	CTAL Sydney	Same provisions as award
1.16.1	P&O Ports Melbourne	Same provision as Sea-Land
–	Patrick Melbourne	No provision outside award
–	Patrick Brisbane	No provision outside award
Long service leave		
Various clauses	Stevedoring Industry (Long Service Leave) Award	Permanent employees are entitled to 13 weeks leave for 15 years continuous service with a loading of 27.5 per cent. Long service leave pro rata entitlements begin after 10 years.
30	Sea-Land Adelaide	Same provisions as the Stevedoring Industry (Long Service Leave) Award, with payments as per aggregate wage
28, PEP	CTAL Sydney	Same provisions as the Stevedoring Industry (Long Service Leave) Award. The Productivity Enhancement Programme has long service leave payments calculated according to the program's hourly rate plus a loading.
1.16.2	P&O Ports	Same provisions as the Stevedoring Industry (Long Service Leave) Award

(cont.)

Clause	*Enterprise agreement*	*Provision*
	Melbourne	
–	Patrick Melbourne	No provision
–	Patrick Brisbane	No provision
Sick leave		
28	Stevedoring Industry Award[a]	Paid sick leave entitlements of 10 days per year. Sick leave is cumulative. Employees may elect to have accumulated sick in excess of 28 days paid out.
29	Sea-Land Adelaide	Similar provisions to award
29	CTAL Sydney	Similar provisions to award
1.16.3	P&O Ports Melbourne	Similar provisions to award
–	Patrick Melbourne	No specific provision
–	Patrick Brisbane	No specific provision
Minimum shift extension payments		
22	Stevedoring Industry Award[a]	An employee who works overtime continuous with the ordinary hours shall be paid for a minimum period of one, two or three hours. An employee that works overtime which is not continuous with the ordinary hours shall be paid for a minimum period of seven hours. Day shift: minimum payment of one or two hours (provided the shift may be extended up to three hours) or one hour where a non-seven-hour shift is worked (provided the shift may be

(cont.)

Clause	*Enterprise agreement*	*Provision*
		extended up to two or three hours). Evening/night shift: minimum payment of one hour for work which is continuous with the evening or night shift (provided the shift may be extended by up to two hours) or minimum payment of seven hours at the appropriate rate for work which is not continuous with a shift. Preparatory work: an employee required to commence a shift early due to preparatory work shall receive a minimum payment of 30 minutes; when a stevedoring employee grade 7 is required to be present at, or liaise with, a pickup centre to implement labour orders outside his or her ordinary shift hours, he or she shall be paid a minimum payment of four hours at the appropriate rate.
21	Sea–Land Adelaide	Day shift: may be extended by one hour, 1.5 hours, or 2.5 hours. (Extensions of up to one hour incur payment of one hour while further extensions incur a minimum payment of 2.5 hours.) Evening/midnight shift: may be extended by one hour. (The award minimum payment provisions hold. Once notified, an extension shall not be cancelled and payments shall be made whether performed or not.)
23	CTAL Sydney	All time worked in excess of the normal length of the shift shall be paid at the rate of ordinary time in addition to the rate for the shift just worked with a minimum payment of 1.5 hours excluding closing work. When day shift is extended by a further hour, the minimum payment shall be 2.5 hours.
3.7.1	P&O Ports Melbourne	Day shift: may be extended for 1.5 hours or 2.5 hours. Evening/midnight shift: may be extended by 1.5 hours. Award minimum payment provisions apply. Receival and delivery: employees required to attend to receival and/or delivery requirements up to one hour before the commencement of the day shift receive a minimum payment of one hour at double time.
29	Patrick Melbourne	Day shift: may be extended up to 2.5 hours with a minimum payment of 1.5 hours. Evening/midnight shift: can be extended by 1.5 hours for any reason and a further hour to finish a hatch, vessel or specific operation which has commenced. The award minimum payments apply.
28	Patrick Brisbane	Day shift: may be extended up to 2 hours. Evening/midnight shift: evening shift may be extended by one hour and a further hour where a hatch vessel or job is unfinished, a labour shortage exists or there is an emergency. Midnight shift may be extended up to one hour in the same circumstances as those for the further hour evening shift extension. The enterprise agreement does not specify minimum payments so the award provisions apply.

(cont.)

Clause	*Enterprise agreement*	*Provision*
Arrangements related to workplace culture		
Dispute resolution procedures		
32	Stevedoring Industry Award[a]	The unions and the employers undertake to take all necessary steps to ensure that branches, officers, members, executives and company staff follow the procedure as set out herein; the intention being that any or all disputes shall be promptly resolved by conciliation in good faith. The employer and the union shall respectively notify each other as soon as possible of any industrial matter which in the opinion of the party notifying may give rise to an industrial dispute including consultation before the introduction of a new method of work or new technology. In the event of a dispute arising at job level, the union delegate/representative and the immediate supervisor shall immediately confer at job level and shall attempt to resolve the issue without delay. If no agreement is reached at job level, a branch official of the union shall discuss the matter in dispute with a representative of local management of the employer. If agreement has not been reached, the employer or the union officer may, where agreed, submit the matter to a mutually agreed independent local conciliator who shall endeavour to reconcile the parties in dispute and for this purpose, may make a recommendation or, where the parties agree, arbitrate the matter. The conciliator shall in all cases make a written summary of the matters in dispute, including the facts as he or she sees them. A copy of such record shall be available for any further non-judicial proceedings between the parties relating to the matters in dispute. Failing agreement on a local basis, effort will then be made to resolve the dispute by negotiations at federal level, including where agreed the involvement of a mutually agreed independent conciliator. Should the foregoing steps fail to resolve the issue within a reasonable time, the matter(s) in dispute shall be referred by either party to the Australian Industrial Relations Commission. The procedures shall not preclude the right of either party to refer a dispute to the Commission at any stage of this procedure if the procedures are not being observed or are otherwise inappropriate in the circumstances. Pending the completion of the procedure set out in this clause, work shall continue without interruption and both parties agree to use their best endeavours to ensure that continuation. No party shall engage in provocative action and pending the resolution of the dispute. The ultimate terms of settlement of the dispute shall not be affected in any way nor shall the rights of any person involved in or affected by the dispute be prejudiced by the fact that work has continued normally without interruption. The procedures and obligations shall be equally binding on the employers and their staff and the employees and their union. The decisions of the Commission shall be accepted and adhered to by all parties

(cont.)

Clause	*Enterprise agreement*	*Provision*
		subject to their rights under the Act.
38	Sea-Land Adelaide	Same as award
39	CTAL Sydney	Same as award
1.22	P&O Ports Melbourne	Same as award
31, schedule 1	Patrick Melbourne	Same as award
schedule 1	Patrick Brisbane	Same as award
Personal grievance resolution		
–	Stevedoring Industry Award[a]	No provision
36	Sea-Land Adelaide	Any employee who considers that they have grounds for a personal grievance may submit the grievance to a supervisor or manager. The grievance shall be so submitted as soon as practicable after the grievance has arisen so as to enable the supervisor or manager to remedy the grievance rapidly and as near as possible to the point of origin. Where the grievance so submitted is not remedied by the supervisor or manager, or the grievance is of such a nature that direct discussion between the employee and the supervisor or manager is regarded by the employee as inappropriate, the employee may request the union to pursue resolution of the grievance. Where the union considers that the personal grievance has substance, it shall forthwith take the matter up with the employer with a view to reaching a settlement of the grievance. In the event that agreement or resolution of the grievance is not reached between Sea-Land and the union, the parties agree to submit the matter to an agreed independent mediator for

(cont.)

Clause	*Enterprise agreement*	*Provision*
		resolution. The decision of the mediator shall be equally binding on all parties.
38	CTAL Sydney	Similar provision to Sea-Land Adelaide
1.21	P&O Ports Melbourne	Similar provision to Sea-Land Adelaide
schedule 4	Patrick Melbourne	Similar provision to Sea-Land Adelaide
schedule 4	Patrick Brisbane	Similar provision to Sea-Land Adelaide
Communication		
–	Stevedoring Industry Award[a]	No specific provision
annexure 1, annexure 5A	Sea-Land Adelaide	Annexure 1 provides for a communication committee with the following objectives: to increase employees' contributions in the decision making process; to focus attention on the requirements of customers and the needs of employees; and to improve site productivity. Annexure 5A provides for an occupational health and safety committee with the following objectives: to involve employees in the maintenance of a safe working environment; to ensure the safety practices and procedures are maintained; to ensure emergency procedures exist in all workplaces; to provide training necessary to support occupational health and safety; and to ensure adequate monitoring of lost-time injuries.
annexure 6	CTAL Sydney	Similar occupational health and safety committee to Sea-Land Adelaide; no communication committee prescribed
annexure 3.6	P&O Ports Melbourne	Similar occupational health and safety committee to Sea-Land Adelaide; no communication committee prescribed
9, 11	Patrick	An enterprise communication and productivity committee comprising management, supervisors, operational

(cont.)

Clause	*Enterprise agreement*	*Provision*
	Melbourne	employees and union representatives which shall meet to discuss and improve the performance of the firm, the welfare of employees and level of customer service is outlined. Clause 11 states that an occupational health and safety committee will improve working conditions and safety.
9, 11	Patrick Brisbane	Same committees as Patrick Melbourne
Disciplinary measures		
8, 13(i)	Stevedoring Industry Award[a]	The employer has the right to dismiss any employee without notice for misconduct that justifies instant dismissal, including malingering, inefficiency or neglect of duty and in such cases the wages shall be paid up to the time of dismissal only. An employee who does not retain the competency, skills or qualifications necessary for the employee's grade, may be re-graded downwards to the next highest grade for which the employee qualifies, provided that: (i) there is notice in writing to the employee of the intention to apply this clause containing particulars of the lost competency, skills or qualifications; (ii) a re-grading under this subclause shall not take place before the employee has had a reasonable opportunity to recover the lost competency, skills or qualifications; (iii) if the employee raises with the employer a grievance concerning the regrading within three days after it is to take effect, the re-grading shall be deemed not to have taken effect until it has been agreed by the employer and the employee's union or has been determined under the avoidance of disputes procedure; (iv) this subclause shall not apply in respect of an employee (1) whose loss of competency, skills or qualifications results directly from an injury or illness for which the employee is entitled to workers' compensation, or (2) who, upon the written advice of a medical practitioner is no longer capable of performing the duties or functions for which the employee is classified (provided that in these circumstances the employer may nominate the medical practitioner and in addition the employer may require, or the employee may request, periodic medical reviews which may include reference to a specialist medical practitioner); *(cont.)*

Clause	*Enterprise agreement*	*Provision*
		(v) in circumstances where paragraph (iv) hereof applies the employee shall retain the higher rate of pay.
37	Sea-Land Adelaide	No direct dismissal clause. However, clause 37 states Sea-Land can take disciplinary action in accordance with the award against any employee in the event of action or conduct contrary to the terms of the enterprise agreement.

(cont.)

Clause	*Enterprise agreement*	*Provision*
37	CTAL Sydney	No direct provision for dismissal although clause 37 states that disciplinary action may be taken by the company in accordance with the award against an employee in the event of any action or conduct which is contrary to the terms of the enterprise agreement.
1.20	P&O Ports Melbourne	Similar provisions as CTAL Sydney
13	Patrick Melbourne	No formal dismissal procedures although clause 13 states that a formal handbook (at the national level) that includes a general code of conduct is to be formulated.
13	Patrick Brisbane	Same provision as Patrick Melbourne

a *Stevedoring Industry Award 1991*

b This provision can not be legally enforced as a result of the *Workplace Relations Act 1996*.

c Generally, the enterprise agreement productivity incentive schemes are based on achieving threshold levels of ship working and receival/delivery with the bonus pool of earnings achieved distributed equally among all employees.

The enterprise agreements compared are: Conaust Ltd, Melbourne Enterprise Agreement 1996 (P&O Ports Melbourne), Patrick Terminals Fisherman Islands Enterprise Agreement 1996 (Patrick Brisbane), Patrick Melbourne Enterprise Agreement 1996 (Patrick Melbourne), Sea-Land (Australia) Terminals Pty Ltd Port Adelaide Terminal Enterprise Agreement 1997 (Sea-Land Adelaide) and the CTAL Enterprise Agreement 1994–1997 (CTAL Sydney). The reference to CTAL Sydney's agreement is the CTAL agreement (CTAL Sydney consists of the former Conaust and CTAL stevedores). A new agreement is being finalised at CTAL Sydney. However, this was unavailable at the time of publication. The long service leave provisions are part of the *Stevedoring Industry (Long Service Leave) Award 1992*. The productivity employment program is an arrangement which remains partly in operation at CTAL Sydney.

Sources: Stevedoring Industry Award; various enterprise agreements

Table J.4: Comparison of award provisions

	Hours of work (average per week)	*Provision for supplementary/casual employment*
Stevedoring Industry Award 1991	35	Supplementary employees to be paid 1/35th of the weekly award wage plus 20 per cent.
Transport Workers Award 1983	38	Casual employees to be paid 1/38th of the appropriate weekly award rate on hourly basis plus 20 per cent.
National Building and Construction Industry Award 1990	No set provision	Daily hire employees paid the hourly award wage times 52 divided by 50.4. The calculation of the hourly rate takes into account a factor of eight days in respect of the incidence of loss of wages for periods of unemployment between jobs.
Storage Services — General — Interim Award 1996	38 (Monday to Friday inclusive, spread over four weeks)	Casual employees shall be guaranteed not less than four hours engagement every start. Paid at the ordinary wage rate with an additional 33.3 per cent loading.
Metal Industry Award 1984	38 (eight hours per day, including meal breaks)	Casual employees to be paid 1/38th of the weekly award wage plus 20 per cent.
	Shift work[a]	*Shift premiums*[b]
Stevedoring Industry Award 1991	Day shift: commencing between 6 a.m. and 9 a.m. Evening shift: commencing between 1 p.m. and 5 p.m. Night shift: commencing at or after 10 p.m.	Sunday night to Friday night–day: ordinary time. Evening: 1.5 times ordinary rate. Night: 2 times ordinary rate. Friday night: 2 times ordinary rate. Saturday day: 2 times ordinary rate. Saturday evening: 2.5 times ordinary rate. Saturday night: 2.5 times ordinary rate. Sunday day: 2.5 times ordinary rate. Sunday evening: 2.5 times ordinary rate.
Transport Workers Award 1983	Day shift: commences at 5.30 a.m. or later, but finishes at or before 6.30 p.m. Afternoon shift: finishes after 6.30 p.m. but not later than 12.30 a.m. Night shift: finishes after	Rotating afternoon shift: ordinary rate plus 15 per cent. Permanent afternoon shift: ordinary rate plus 17.5 per cent. Rotating night shift: ordinary rate plus 20 per cent. Permanent night shift: ordinary rate plus 30

(cont.)

	Shift work(cont.)[a]	*Shift premiums*[b] *(cont.)*
	12.30 a.m and at or before 8.30 a.m.	per cent. Permanently working alternate night and afternoon shift: where for an afternoon shift: ordinary rate plus 17.5 per cent: where on night shift: ordinary rate plus 30 per cent. Shiftwork performed on a Saturday: time and a half rates. All time of duty on any Sunday shall stand alone and shall be paid for at the rate of double time with a minimum payment of four hours pay at double time.
National Building and Construction Industry Award 1990	Afternoon shift: finishes at or after 9 p.m. and at or before 11 p.m. Night shift: finishes after 11 p.m. and at or before 7 a.m. Morning shift: finishes after 12.30 p.m. and at or before 2 p.m. Early afternoon shift: finishes after 7 p.m. and at or before 9 p.m.	Continuous employees for five shifts Monday to Friday. Afternoon and night shift: ordinary time plus 50 per cent. Morning and early afternoon shifts: ordinary time plus 25 per cent. Broken shifts (that is, fewer than five consecutive shifts Monday to Friday): ordinary time plus 50 per cent for the first two hours and double ordinary time rates thereafter.
Storage Services — General — Interim Award 1996	Ordinary working days of the week: 7 a.m. to 5.30 p.m. An employer shall not alter the starting and finishing times in any establishment without giving one week's notice.	Where relevant, terms and conditions for shiftwork are included in other awards covering storemen and packers.
Metal Industry Award 1984	The ordinary hours of work prescribed herein shall be worked continuously, except for meal breaks, at the discretion of the employer between 6 a.m. and 6 p.m. Provided that the actual ordinary hours of work shall be determined by agreement between an employer and the majority of employees in the plant or work section or sections concerned. Afternoon shift: any shift finishing after 6 p.m. and at or before midnight. Night shift: any shift finishing subsequent to midnight and at or before 8 a.m. Rostered shift: a shift of which the employee concerned has had at least 48 hours notice.	Afternoon and night shift: ordinary rate plus 15 per cent. Afternoon and night shift that does not continue for at least five successive days in a five-day workshop or six successive days in a six-day workshop: ordinary rate plus 50 per cent for the first three hours and ordinary rate plus 100 per cent thereafter. Permanent night shift: ordinary rate plus 30 per cent. Between midnight on a Friday and midnight on the following Saturday: minimum rate of time and a half.

(cont.)

	Penalties[c]	*Minimum payments*
Stevedoring Industry Award 1991	Continuous with usual shift: the ordinary rate in addition to the rate appropriate for the shift to be worked. Non-continuous with usual shift: twice the ordinary rate for Monday to Saturday, 2.5 times the ordinary rate on a Sunday and on the day and evening shift on a public holiday, and three times the ordinary rate on the night shift on a public holiday. The first double header (double shift) worked during a week (Monday to Friday): the ordinary rate in addition to the rate appropriate to the additional shift worked. The first double header on Saturdays, Sundays, and holidays: half the ordinary rate in addition to the rate appropriate to the additional shift worked.	A minimum payment for seven hours is required where the overtime is not continuous with the ordinary hours of work. Where an employee is required to work overtime that is continuous with the ordinary hours of work, the minimum payment is for one, two or three hours depending on the shift extension.
Transport Workers Award 1983	For all work done outside ordinary hours the rate of pay shall be time and a half for the first two hours and double time thereafter, such double time to continue until the completion of the overtime work. Shiftwork on weekend and holidays: time and a half rates, except for Good Friday and Christmas Day which are double time. If an employee is required to work on a holiday other than Good Friday and Christmas Day during hours which, if the day was not a holiday, would be outside the range of ordinary working time, he shall be paid for such hours at double time and a half, instead of the ordinary time and a half. Provided further that he shall be paid treble time for all overtime worked on Good Friday and Christmas Day.	Minimum payment for four hours for working on a Saturday, Sunday or public holiday.

(cont.)

	Penalties(cont.)[c]	*Minimum payments (cont.)*
National Building and Construction Industry Award 1990	All time worked beyond the ordinary time of work inclusive of time worked for accrual purposes of this award shall be paid for at the rate of one and a half times ordinary rates for the first two hours thereof and at double time thereafter. An employee recalled to work overtime after leaving his/her employer's business premises (whether notified before or after leaving the premises) shall be paid for a minimum of three hours work at the appropriate rates for each time he/she is so recalled; provided that except in the case of unforeseen circumstances arising, the employee shall not be required to work the full three hours if the job he/she was recalled to perform is completed within a shorter period. Overtime work on Saturday shall be paid for at the rate of time and a half for the first two hours and double time thereafter, provided that all overtime worked after 12 noon on Saturday shall be paid for at the rate of double time. Provided that all work performed on the Saturday following Good Friday shall be paid for at the rate of double time and a half. All time worked on Sundays shall be paid for at the rate of double time. An employee required to work overtime on a Saturday or to work on a Sunday shall be afforded at least three hours work on a Saturday or four hours work on a Sunday or shall be paid for three hours on a Saturday or four hours on a Sunday at the appropriate rate. Provided that an employee required to work on the Saturday following Good Friday shall be afforded at least four hours work or paid for four hours at	Minimum payment for working overtime is for three hours on a Saturday and four hours on a Sunday. A minimum payment for four hours applies to working overtime on a public holiday. A minimum payment for three hours is required where an employee is recalled to work overtime after leaving his/her employer's business premises. There is a minimum payment for three hours on Sunday and for Union Picnic Day.

(cont.)

	Penalties(cont.)[c]	*Minimum payments (cont.)*
	the appropriate rate. Double time and a half for work on a public holiday.	
Storage Services — General — Interim Award 1996	Time and a half for the first two hours and double time thereafter calculated on a daily basis. Provided that when double time becomes payable it shall continue until the completion of the overtime worked. An employee who works eight ordinary hours Monday to Friday with a day off in the fourth week, is paid overtime after eight hours each day.	Where an employee is required to work in a higher grade, pay for up to three hours on any one day at the rate prescribed for such higher classification (with a minimum of one hour); where work is more than three hours on any one day, a full day's pay at the rate prescribed for such higher classification; where such work is more than 20 hours in any one week, a full week's pay at the rate prescribed for such higher classification.
	Double time shall be the rate for all work done on Sunday and Union Picnic Day. Double time and a half shall be the rate for all work done on New Year's Day, Australia Day, Good Friday, Easter Monday, Labour Day, Anzac Day (in industries named in the Seventh Schedule to the Labour and Industry Act), Queen's Birthday, Melbourne Cup Day, Christmas Day and Boxing Day.	An employee recalled to work overtime after leaving the employer's business shall be paid for a minimum for four hours work at the appropriate rate for each time he/she is recalled, provided that if such recall is made after 12 noon on a Saturday, the employee shall be paid at the rate of double time.
Metal Industry Award 1984	For all work done outside ordinary hours, the rates of pay shall be time and a half for the first three hours and double time after that, and double time will continue until the completion of the overtime work. An employee not engaged on continuous work shall be paid at the rate of double time and a half for work done on public holidays, with such double time and a half to continue until he is relieved from duty.	Minimum payment for four hours for overtime on a Saturday and for three hours for work on a Sunday or public holiday.

(cont.)

	Grounds for dismissal	*Allowances*
Stevedoring Industry Award 1991	The employer has the right to dismiss any employee without notice for misconduct that justifies instant dismissal, including malingering, inefficiency or neglect of duty and in such cases the wages shall be paid up to the time of dismissal only.	Clause 14a provides a laundry or drycleaning allowance of $6.95 per week per employee. Clause 14b provides a telephone allowance of $6.40 per week in the case where employees are required to telephone for their labour allocation. Clause 14c specifies a consolidated disability allowance which varies between grades. This allowance is compensation for such factors as conditions which are unusually dirty, confined spaces, height, noise or heavy lifting.
Transport Workers Award 1983	Immediate dismissal for conduct that justifies instant dismissal, including malingering, inefficiency or neglect of duty.	There is a special allowance for workers in the Northern Territory in addition to district allowances for workers in Queensland and Western Australia. Also where an employer covered by this award contracts with a principal site contractor to perform recognised on-site construction work, he shall pay the applicable site and/or disability allowance (as determined by the Commission) payable to employees while engaged in such work. An employee engaged in ordinary travelling on duty or on work on which is unable to return to his home at night shall be paid personal expenses as he reasonably incurs in travelling, but shall be paid the sum of $22.21 per day at least. Where an employer requires an employee to give change to clients, such change shall be supplied by the employer.
National Building and Construction Industry Award 1990	The employer has the right to dismiss an employee without notice for misconduct or refusing duty.	In general there are expense-related allowances, industry allowances, disability allowances, location allowances (including accommodation), tools allowances, special rates or allowances, and responsibility allowances. For example, an employee shall be paid an allowance at the rate of $16.90 per week to compensate for the following disabilities associated with construction work; (a) climatic conditions when working in the open on all types of work; (b) the physical disadvantage of having to climb stairs or ladders; (c) the disability of dust blowing in the wind, brick dust and drippings from newly poured concrete; (d) sloppy and

(cont.)

	Grounds for dismissal (cont.)	*Allowances (cont.)*
		muddy conditions associated with the initial stages of the erection of a building; (e) the disability of working on all types of scaffolds or ladders other than a swing scaffold, suspended scaffold or a bosuns chair. An employee required to work underground shall be paid an allowance of $8.31 per week for all purposes of the award in addition to the above allowances. Extra rates shall be paid to employees for many other tasks such as insulation work, working with heavy equipment, working with toxic and dangerous substances, and height work. A multistorey allowance shall be paid to all employees on site engaged in construction or renovation of a multistorey building to compensate for the disabilities experienced in, and which are peculiar, to construction or renovation of a multistorey building. An allowance for travel and mobility requirements is also specified in the award. An employee required to work overtime for at least 1.5 hours after working ordinary hours inclusive of time worked for accrual purposes shall be paid by his/her employer an amount of $7.70 to meet the cost of a meal. An employee living in a construction camp where free messing is not provided shall receive a camping allowance of $115.90 for every complete week he/she is available for work. If required to be in camp for less than a complete week, he/she shall be paid $16.70 per day including any Saturday or Sunday if he/she is in camp and available for work on the working days immediately preceding and succeeding each Saturday and Sunday.
Storage Services — General — Interim Award 1996	The employer shall have the right to dismiss any employee without notice for conduct that justifies instant dismissal, including malingering, inefficiency or neglect of duty and in such cases the wages shall be paid up to the time of dismissal only.	An employee required to work overtime for any period in excess of one hour after the usual hour of ceasing duty shall be paid an allowance of $7.90 as meal money, provided that such meal allowance shall not be payable to an employee who can reasonably return home for a meal. An employee who on any day or from day to day is required to work at a job away from his accustomed workshop or depot shall at the direction of his

(cont.)

	Grounds for dismissal (cont.)	*Allowances (cont.)*
		employer present for work at such job at the usual starting time, but for all time reasonably spent in reaching and returning from such job (in excess of the time normally spent in travelling from his home to such workshop or depot and returning) he shall be paid travelling time, and also any fares reasonably incurred in excess of those normally incurred in travelling between his home and such workshop or depot. The rate of pay for travelling time shall be ordinary rates, except on Sundays and holidays when it shall be time and a half. An employee, qualified to St. John's Ambulance standard or equivalent, if requested to act as the First Aid Attendant shall be paid an allowance of $6.30 per week.
Metal Industry Award 1984	Employment can be terminated as a consequence of conduct that justifies instant dismissal, including malingering, inefficiency or neglect of duty.	Working in boiling down works: 24 cents per hour extra. Working for more than one hour in places where the temperature is reduced by artificial means below 0 degrees Celsius: 34 cents per hour extra. Working in confined space (as defined): 45 cents per hour extra. Work, other than ship repair work, which a foreman and workman shall agree is of an unusually dirty or offensive nature: 35 cents per hour extra. Employees other than linesmen, linesmen's assistants, riggers and splicers engaged in the construction, erection, repair and/or maintenance as the case may be, of ships, steel frame buildings, bridges, gasometers or other structures at a height in each case of 15 metres or more directly above the nearest horizontal plane: 24 cents per hour extra. Working for more than one hour in the shade in places where the temperature is raised by artificial means to 46–54 degrees Celsius: 35 cents per hour extra; in places where the temperature exceeds 54 degrees Celsius: 45 cents per hour extra. Working in lead works: 24 cents per hour extra. Pattern maker in lignum vitae outside the workshop and fitting to stern bushes: 45 cents per hour extra. Working on repairs in oil tanks or meat digestors: 35 cents per hour extra. Provided that if any employee is so engaged for more than

(cont.)

	Grounds for dismissal (cont.)	*Allowances (cont.)*
		half of one day or shift he shall be paid the prescribed allowance for the whole day or shift. Working in sanitary works: 22 cents per hour extra. An employee who is working aboard a ship while bulk wheat is being loaded into the ship and who is subject to the dust arising from such loading shall be paid 45 cents per hour extra while so working. There are many other work site allowances such as payments for working with power tools, in submarines and in wet places. An employee who by agreement with the employer uses his own motor vehicle on the employer's business shall be paid an allowance of 52 cents per kilometre travelled. In clause 37 there are similar allowances to those mentioned for various districts, industries and plants where metal industry workers are employed. Clause 48 provides site allowances for New South Wales sugar milling employees. Workers in New South Wales, Victoria, South Australia, Queensland (air-conditioning and refrigeration work only) and Tasmania also have on-site construction work allowances, including a travel fare.
	Annual leave (weeks)	*Annual leave loading*
Stevedoring Industry Award 1991	Five weeks annual leave for shift workers for each year of continuous service. Annual leave can be taken over three periods during one year, each of which not less than one week.	27.5 per cent
Transport Workers Award 1983	28 consecutive days (four weeks) per year to an employee after 12 months continuous service.	17.5 per cent
National Building and Construction Industry Award 1990	28 consecutive days (four weeks) to all employees other than casuals, after 12 months continuous service.	17.5 per cent

(cont.)

	Annual leave (weeks) (cont.)	*Annual leave loading (cont.)*
Storage Services — General — Interim Award 1996	At the end of each year of employment by any employer, an employee becomes entitled to an annual holiday of four weeks on ordinary pay.	17.5 per cent. In the case of a shift worker where the employee would have received shift loadings had the employee not been on leave during the relative period and such loadings would have entitled such employee to a greater amount than the 17.5 per cent loading, then the shift loadings shall be added to the employee's ordinary pay in lieu of the annual leave loading.
Metal Industry Award 1984	Four weeks per year for a year of continuous service. However where an employee with 12 months continuous service is engaged for some of that time as a seven-day shift worker, the worker shall be entitled to an increase by half a day for each month they are engaged as a shift worker.	17.5 per cent
	Sick leave	*Bereavement leave*
Stevedoring Industry Award 1991	Paid sick leave entitlements of 10 days per year. Sick leave is cumulative.	Three days paid leave on each legitimate occasion.
Transport Workers Award 1983	Sick leave is paid leave. The employee shall not be entitled during the first year of any period of service to leave in excess of five days of ordinary working time, or in the case where the employee normally works more than ordinary hours in any day, shall not be entitled to leave in excess of 38 hours of ordinary working time. An employee shall not be entitled during the second or subsequent year of any period of service with any employer to leave in excess of eight days of ordinary working time.	Two days paid leave on each legitimate occasion.

(cont.)

	Sick leave (cont.)	*Bereavement leave (cont.)*
National Building and Construction Industry Award 1990	An employee during his/her first year of employment with an employer shall be entitled to sick leave entitlement at the rate of one day at the beginning of each of the first ten calender months of his/her first year of employment. Sick leave with an employer shall accumulate from year to year so any balance of the period specified accumulates, provided that an employee who has completed one year of continuous employment shall be credited with a further ten days sick leave entitlement at the beginning of his/her second and each subsequent year.	Up to two days paid leave
Storage Services — General — Interim Award 1996	During the first year: five days of ordinary working time calculated pro rata from the first year of service. During any subsequent year of service: ten days of ordinary working time. Sick leave is cumulative.	Up to two days without loss of pay on each legitimate occasion
Metal Industry Award 1984	An employee shall not be entitled during the first year of any period of service with an employer to leave in excess of five days of ordinary working time or in cases where he normally works more than eight ordinary hours in any day, he shall not be entitled to leave in excess of 40 hours of ordinary working time. Provided further that during the first five months of the first year of a period of service with an employer he shall be entitled to sick leave which shall accrue on a pro rata basis of one day of ordinary working time for each month of service completed with that employer to a maximum of 40 ordinary hours. Employees shall not be entitled during the second or	Two days without loss of pay on each legitimate occasion

(cont.)

	Sick leave (cont.)	*Bereavement leave (cont.)*
	subsequent year of any period of service with an employer to leave in excess of eight days of ordinary working time, or in excess of 64 hours of ordinary working time in the case of an employee who normally works more than eight ordinary hours on any day.	
	Long service leave	*Long service leave loading*
Stevedoring Industry Award 1991	No provision. Under the *Stevedoring Industry (Long Service Leave) Award 1992* permanent employees are entitled to 13 weeks leave for 15 years continuous service. Long service leave pro-rata entitlements begin after 10 years.	No provision. Under the *Stevedoring Industry (Long Service Leave) Award 1992*, employees are entitled to 27.5 per cent loading.
Transport Workers Award 1983	No award provision[d]	No award provision[e]
National Building and Construction Industry Award 1990	No award provision[d]	No award provision[e]
Storage Services — General — Interim Award 1996	No award provision[d]	No award provision[e]
Metal Industry Award 1984	No provision. Under the *Metal Industry (Long Service Leave) Award 1984* in respect of 15 years service so completed: 13 weeks. And in respect of each 10 years' service with the employer completed since last entitled to long service leave: eight and two-thirds weeks.	Under the *Metal Industry (Long Service Leave) Award 1984*, there is no loading.

(cont.)

	Other leave arrangements[f]	*Public holidays*
Stevedoring Industry Award 1991	Employees are entitled to maternity, paternity and adoption leave and to work part-time in connection with the birth or adoption of a child. Maternity, paternity and adoption leave is unpaid leave.	New Year's Day, Good Friday, Easter Saturday, Easter Monday, Christmas Day and Boxing Day; Australia Day, Anzac Day, Queen's Birthday (or State Foundation Day in Western Australia), Labour Day; Picnic Day on a common day in each State or Territory, Melbourne Cup Day (Victoria), Geelong Cup Day and Proclamation Day (South Australia). Where in a State, Territory or locality, public holidays are declared or prescribed on days other than those set out above, those days shall constitute additional holidays for the purpose of this award.
Transport Workers Award 1983	Provisions exist in the award for various forms of paid and unpaid leave including family leave, bereavement leave, maternity leave, parental leave and adoption leave.	An employee on weekly hiring shall be entitled to holidays on the following days: (i) New Year's Day, Good Friday, Easter Saturday, Easter Monday, Christmas Day and Boxing Day (except in South Australia, where Proclamation Day shall apply); and (ii) the following days, as prescribed in the relevant States, Territories and localities: Australia Day, Anzac Day, Queen's Birthday and Eight Hours' Day or Labour Day; and one other holiday on the day fixed as follows: Northern Territory: Picnic Day. Queensland: Exhibition Day. Victoria: Within 40 km of the GPO Melbourne — the day to be agreed to by the employer and the employees, and notified beforehand to the union, and in default thereof the day upon which the Melbourne Cup is run. In any other district — one day for which a whole or part holiday for the public service is gazetted for the district or, in default thereof, a day agreed to by the employer and employees concerned and notified beforehand to the union. South Australia: the day shall be allowed on the third Monday in May (Adelaide Cup Day). Tasmania: the day shall be allowed on Regatta Day in southern Tasmania and on Bank Holiday in northern Tasmania. Western Australia: the day shall be allowed on Foundation Day (State). Additional State public holidays are granted such as Melbourne Cup Day in Victoria.

(cont.)

	Other leave arrangements (cont.)[f]	*Public holidays (cont.)*
National Building and Construction Industry Award 1990	Award provisions include paid and unpaid bereavement leave and parental leave.	New Year's Day, Australia Day, Good Friday, Easter Monday, Anzac Day, Queen's Birthday (except in Western Australia where Union Picnic Day will be held in lieu thereof), Eight Hour Day or Labour Day, Christmas Day, Boxing Day (except in South Australia where Commemoration Day: (28th December) shall be observed as a holiday throughout the State, except at Whyalla, instead of Boxing Day), or such other day as is generally observed in a locality as a substitute for any of the said days respectively.
Storage Services — General — Interim Award 1996	A union delegate or elected workplace representative with more than six months continuous service with approval of the union and upon application in writing, shall be granted up to five days leave with pay each calendar year, non-cumulative, to attend courses conducted or approved by the Trade Union Training Authority. Special family leave can be taken as unpaid leave by agreement in order for an employee to take care of an ill family member. There is a also maternity, paternity and adoption leave, all of which are unpaid leave.	New Year's Day, Good Friday, Easter Saturday, Easter Monday, Christmas Day and Boxing Day and the following days as prescribed in the relevant States, Territories and localities: Australia Day, Anzac Day, Queen's Birthday and Eight Hour Day or Labour Day; and Union Picnic Day in lieu of Melbourne Cup Day. Where in a State, Territory or locality public holidays are declared or prescribed on days other than those set out above shall constitute additional holidays for the purpose of this award.
Metal Industry Award 1984	Provisions in the award cover different types of paid and unpaid leave including maternity leave, parental leave, family leave and bereavement leave.	New Year's Day, Australia Day, Good Friday, Easter Saturday, Easter Monday, Anzac Day, Queen's Birthday, Eight Hour Day or Labour Day, Christmas Day, Boxing Day (except in South Australia where Commemoration Day (28 December) shall be observed as a holiday throughout the State, except at Whyalla, instead of Boxing Day) or such other day as is generally observed in a locality as a substitute for any of the said days respectively. Provided that, in the State of Tasmania only, Show Day shall be a Public Holiday in lieu of Easter Saturday, which means not more than one local show day observed on an employees

(cont.)

	Other leave arrangements (cont.)[f]	*Public holidays (cont.)*
		ordinary working day, other than a Saturday or a Sunday, in the city, town or district in which the employee is employed; or such other day which, in the absence of such a local show day, is agreed on by the employee and the employer, therefore making a total of eleven paid public holidays per year. One additional State public holiday also applies.
	Superannuation	*Occupational health and safety*
Stevedoring Industry Award 1991	No provision for superannuation	Employees directly concerned with an operation said to be unsafe have the right to cease performing that work pending the resolution of the issue. Where it is determined that the operation was safe, no wages shall be paid to the employees concerned for the period that work was stopped. An employee shall not be required to perform work which is unsafe having regard to the terms of the Industry Safety Code.
Transport Workers Award 1983	The nominated fund for the purpose of this clause shall be the TWU Superannuation Fund. Contributions shall be at the rate prescribed from time to time by the *Transport Workers (Superannuation) Consolidated Award 1987*.	Any direction issued by an employer shall be consistent with the employer's responsibilities to provide a safe and healthy working environment.
National Building and Construction Industry Award 1990	Employees have a choice of one of several funds. An employer shall contribute an amount on behalf of each eligible employee into a relevant superannuation fund, which reflects the employer's liability.	Any direction issued by an employer shall be consistent with the employer's responsibilities to provide a safe and healthy working environment. An employee required to use toxic substances shall be informed by the employer of the health hazards involved and instructed in the correct and necessary safeguards which must be as are defined by a competent authority chosen by the union and the employer. Employees required to use materials containing asbestos or to work in close proximity to employees using such materials shall be provided with and shall use all necessary safeguards as required by the appropriate occupational health authority. Where an employee is prevented from

(cont.)

	Superannuation (cont.)	*Occupational health and safety (cont.)*
		working as a result of unsafe conditions caused by inclement weather, he/she may be transferred to other work in his/her trade on site, until the unsafe conditions are rectified. Where such alternative work is not available and until the unsafe conditions are rectified, the employee shall remain on site. He/she shall be paid for such time without reduction of his/her inclement weather entitlement. The roles of health and safety representatives and committees are also set out in the award.
Storage Services — General — Interim Award 1996	The superannuation fund is the Labour Union Co-operative Retirement Fund. The employer shall make a superannuation contribution to the fund on behalf of the eligible employees, of an amount equivalent to 3 per cent of the employees' ordinary time earnings. Employees may make additional contributions.	Part 10 refers to relevant workers' compensation legislation.
Metal Industry Award 1984	No award provision for superannuation	Any direction issued by an employer shall be consistent with the employer's responsibilities to provide a safe and healthy working environment. Employer and employees concerned are to be guided by the occupational health and safety provisions of the ACTU Code of Conduct on 12-hour shifts. All aspects of asbestos work will meet as a minimum standard the provision of the National Health and Medical Research Council Codes as varied from time to time for the safe demolition/removal of asbestos-based materials.

(cont.)

	Redundancy
Stevedoring Industry Award 1991	No provision for redundancy
Transport Workers Award 1983	Employees are entitled to the following amount of severance pay in respect of a continuous period of service: – one year or less — nil; – one year and up to the completion of two years — four weeks; – two years and up to the completion of three years — six weeks; – three years and up to the completion of four years — seven weeks; – four years and over — eight weeks.
National Building and Construction Industry Award 1990	A redundant employee shall receive redundancy/severance payments as follows: – one year or more but less than two years — 2.4 weeks pay plus, for all service in excess of one year, 1.75 hours pay per completed week of service up to a maximum of 4.8 weeks; – two years or more but less than three years — 4.8 weeks pay plus, for all service in excess of two years, 1.6 hours pay per completed week of service up to a maximum of seven weeks. – three years or more but less than four years — seven weeks pay plus, for all service in excess of three years,

(cont.)

	Redundancy (cont.)
	0.73 hours pay per completed week of service up to a maximum of eight weeks. – four years or more — eight weeks pay. 'Weeks pay' means the ordinary time rate of pay at the time of termination for the employee concerned.
Storage Services — General — Interim Award 1996	Similar provisions to the *Transport Workers Award 1983*
Metal Industry Award 1984	Similar provisions to the *Transport Workers Award 1983*

a Enterprise agreements in the container stevedoring industry specify shift arrangements within their individual rostering arrangements.

b Some shift premiums for the container stevedoring industry are also specified in enterprise agreements.

c Enterprise agreements in the container stevedoring industry also specify some penalties such as for double headers and shift extensions.

d Employees under these awards are covered by various state long service leave Acts. For example, employees in South Australia are entitled to 13 weeks after 10 years service under the *Long Service Leave Act (SA) 1997*. In NSW, employees are entitled to 13 weeks after 15 years service under the *Long Service Leave Act (NSW) 1955.*

e Under the various state long service leave acts there is no leave loading.

f Some of the agreements have leave clauses which are read in conjunction with the award provisions on these forms of leave. For example, they may specify when leave can be taken.

Sources: *Stevedoring Industry Award 1991; Stevedoring Industry (Long Service Leave) Award 1992; National Building and Construction Industry Award 1990; Metal Industry Award 1984; Transport Workers Award 1983; Transport Workers (Long Service Leave, ACT) Award 1961;* and the *Storage Services — General — Interim Award 1996*

REFERENCES

ABS (Australian Bureau of Statistics) 1997a, *Industrial Disputes, Australia*, cat. no. 6322.0 (and previous issues), AGPS, Canberra.

—— 1997b, *Labour Mobility Australia during the year ending February 1994*, cat. no. 6209.0, AGPS, Canberra.

—— 1997c, *Trade Union Members, Australia*, cat. no. 6325.0, AGPS, Canberra.

—— 1997d, *Consumer Price Index*, September, cat. no. 6401.0, AGPS, Canberra.

—— 1996a, *Employee Earnings and Hours, Australia*, May, cat. no. 6305.0, AGPS, Canberra.

—— 1996b, *Labour Force, Australia*, August, cat. no. 6302.0, AGPS, Canberra.

ACCC (Australian Competition and Consumer Commission) 1998, *ACCC waterfront investigations*, Media Release, online: http://www.accc.gov.au (cited 4 March 1998), 5 February.

AIRC (Australian Industrial Relations Commission) 1998, *Penalty Rates*, Decision 365/98, Print P9677, 27 March.

—— 1997a, Award simplification decision: the *Hospitality Industry — Accommodation, Hotels, Resorts and Gaming Award 1995*, Decision no. 1533/97, M Print P7500, 23 December.

—— 1997b, Decision no. 1327/97, N Print P6375, 28 October.

—— 1997c, Decision no. 1549/97, S Print P7612, 18 December.

—— 1994a, Decision 441/94, M Print L2110, 1 March.

—— 1994b, Decision 460/99, M Print L2161, 3 March.

Beasley, M. 1996, *Wharfies: The History of the Waterside Workers Federation of Australia*, Halstead Press, Sydney.

BHP 1996, *Stocktake on Progress in Microeconomic Reform*, Submission no. 30, Industry Commission, 23 May.

BIE (Bureau of Industry Economics) 1995a, *International Performance Indicators: Coastal Shipping*, Research report 68, AGPS, Canberra.

—— 1995b, *Waterfront 1995: International Benchmarking*, Research report 95/16, AGPS, Canberra.

Boland, R. 1997, Outcomes of the new legislation: the employers' experience, paper presented at 'Outcomes of the new legislation', Sydney, July.

BTCE (Bureau of Transport and Communications Economics) 1998, *Waterline*, Issue 14, Canberra.

—— 1997a, *Waterline*, Issue 11, Canberra.

—— 1997b, *Waterline*, Issue 13, Canberra.

—— 1997c, *Waterline*, Issue 12, Canberra.

—— 1996, *Waterline*, Issue 9, Canberra.

—— 1995a, *Review of the Waterfront Industry Reform Program*, Report 91, AGPS, Canberra.

—— 1995b, *Waterline*, Issue 5, Canberra.

—— 1994, *Waterline*, Issue 1, Canberra.

—— 1993, *Review of Part X of the Trade Practices Act 1974: An Assessment of the Economic Issues*, AGPS, Canberra.

BTE (Bureau of Transport Economics) 1986, *Shore-based Shipping Costs Seminar Proceedings*, AGPS, Canberra.

Callus, R., Morehead, A., Cully, M. and Buchanan, J. 1991, *Industrial Relations at Work: The Australian Workplace Industrial Relations Survey*, Commonwealth Department of Industrial Relations, AGPS, Canberra.

Coombs, J. 1997, *Waterfront Reform*, Transcript of AM, ABC Radio, 15 October.

Dick, H. 1992, 'Progress and frustration: restructuring of coastal shipping and ports,' in Forsyth, P. (ed), *Microeconomic Reform in Australia*, Allen and Unwin, St Leonards, New South Wales.

Duncan, I. 1996, 'Public enterprises,' in Silverstone, B., Bollard, A. and Lattimore, R. (eds), *A Study of Economic Reform: The Case of New Zealand*, North-Holland, Amsterdam.

—— and Bollard, A. 1992, *Corporatisation and Privatisation: Lessons from New Zealand*, Oxford University Press, Auckland.

DWRSB (Department of Workplace Relations and Small Business) 1998, *Workplace Relations Act Monitor, December Quarter 1998*, online: http://www.dwrsb.gov.au/wract/monitor/dec1.htm, (cited 16 March 1998).

—— 1997, *Workplace Relations Act Monitor, September Quarter 1997*, online: http://www.dwrsb.gov.au/wract/monitor/sept1.htm, (cited 16 January 1998).

Easson, M., McCann P. and Ronfeldt, P. 1997, *Consultancy for Research and Advice on Maritime and Stevedoring Occupational Health and Safety Issues*, Commonwealth Department of Transport and Regional Development Consultancy Commission no. 97/0733, Corrs Chambers Westgarth, October.

Elliott, R. 1991, *Labour Economics: A Comparative Text*, McGraw-Hill, London.

Evans, L., Grimes, A., Wilkinson, B. and Teece, D. 1996, 'Economic reform in New Zealand,' *Journal of Economic Literature*, December, pp. 1856–1902.

Evans, P. 1994, Report to the Minister for Transport and Industrial Relations by Mr Peter Evans in relation to the Australian Stevedores Dispute, February.

Farynski, J. and Gash, A. 1997a, 'AIRC backs Patrick Melb shake-up,' *Daily Commercial News*, 24 October, p. 1.

—— 1997b, 'Freo go-slow after 'nick-off' sackings,' *Daily Commercial News*, 12 November, p. 1.

Hirst, J. 1997, *Privatisation of Ports in Australia, United Kingdom and New Zealand*, Proceedings of the Western Australian Port Authorities Conference, Dampier, July.

Hofstede, G. 1991, *Cultures and Organisations: Software of the Mind*, McGraw-Hill, London, UK.

HRSCTCI (House of Representatives Standing Committee on Transport, Communications and Infrastructure) 1992, *Efficiency of the Interface between Sea Ports and Land Transport: Warehouse to Wharf*, (P. Morris, Chairman), AGPS, Canberra.

Ichniowski, C. and Shaw, K. 1995, 'Old dogs and new tricks: determinants of the adoption of productivity-enhancing work practices', *Brookings Papers: Microeconomics*, pp. 1–65.

IC (Industry Commission) 1996, *Competitive Tendering and Contracting by Public Sector Agencies*, Report no. 48, AGPS, Melbourne, 24 January.

—— 1995, *Work Health and Safety*, Report no. 47, AGPS, 11 September.

—— 1993, *Port Authority Services and Activities*, Report no. 31, AGPS, 31 May.

Industry Task Force on Shore-Based Shipping Costs 1986, *Shore-Based Shipping, Final Report*, AGPS, Canberra.

ISC (Inter-State Commission) 1989a, *Waterfront Investigations: Conclusions and Recommendations*, vol. 1, AGPS, Canberra.

—— 1989b, *Waterfront Investigation: Conclusions and Recommendations*, vol. 2, appendixes, AGPS, Canberra.

—— 1988, *Preliminary Findings and Discussion Papers, Employment Arrangements*, vol. 3, AGPS, Canberra.

Kierce, S. 1996, The Australian Waterfront: An Economic Evaluation, Unpublished honours thesis, Macquarie University, Sydney.

Maggs, G., Testi, J. and Rimmer, M. 1996**,** *Study of Annualised Wage Systems*, National Key Centre in Industrial Relations, Monash University, Victoria.

Maloney, T. and Savage, J. 1996, 'Labour markets and policy,' in Silverstone, B., Bollard, A. and Lattimore, R. (eds), *A Study of Economic Reform: The Case of New Zealand*, North-Holland, Amsterdam.

McCallum, R., Pittard, M. and Smith, G. 1990, *Australian Labour Law*, Butterworths, Sydney.

Melbourne Port Corporation 1996, *Annual Report 1995-96*, Melbourne.

Miller, P., Mulvey, C. and Norris, K. 1997, 'Compensating differentials for risk of death in Australia', *Economic Record*, vol. 73, no. 223, pp. 363–72.

MTIA (Metal Trades Industry Association) 1996, *The Waterfront: Major Areas for Reform*, MTIA, November.

MUA (Maritime Union of Australia) 1997a, Waterfront reform and productivity, Media release, August 20.

—— 1997b, 'Top terminal', *Maritime Workers Journal*, July/August, pp. 44–47.

—— 1997c, Re: The 'Nick', Media release, 1 September 1997.

—— 1997d, 'Work transfer dispute', *Maritime Workers Journal*, May/June, p. 16.

—— 1997e, 'Wage strategy', *Maritime Workers Journal*, May/June, p. 9.

—— 1997f, 'Sign here for a pay cut', Media release, August 20.

—— 1995, 'PEP talk', *Maritime Workers Journal*, MUA, March/April, pp. 10–11.

—— 1994a, '300 recruits in 10 ports', *Maritime Workers Journal*, November/December, pp. 4–7.

—— 1994b, 'Workaholics no more', *Maritime Workers Journal*, November/December, pp. 8–11.

Norington, B. 1997, 'Unions 1, Govt 0,' *Sydney Morning Herald*, 20 September, p. 37.

PC (Productivity Commission) 1998, *International Benchmarking of the Waterfront*, Ausinfo, Melbourne, April.

Ports of Auckland 1997, *Annual Report*, Auckland, New Zealand.

Queensland Manufacturing Industry Forum 1997, *Submission to the Industry Commission's Black Coal Industry Inquiry*, Industry Commission, Submission no. 2, 18 September.

Ramsey, A. 1997, 'Sharp man on the Waterfront,' *Sydney Morning Herald*, 20 September, p. 46.

Reveley, J. 1997, 'Waterfront and Labour Reform in New Zealand: Pressures, Processes and Outcomes', in *The Journal of Industrial Relations*, vol. 39, no. 3, September, pp. 369–387.

Robinson, R. and Everett, S. 1997, *Productivity of Australian Container Terminals: Some Critical Issues*, Working Paper 97-3, Institute of Transport Studies, University of Sydney and Monash University.

Savage, J. 1997, 'Recent developments in the New Zealand labour market,' Industry Commission (ed.), *Changing Labour Markets: Prospects for Productivity Growth*, Melbourne, pp. 157–75.

—— and Cooling, D. 1996, *A Preliminary Report on the Results of a Survey on the Employment Contracts Act*, Working paper 96/7, New Zealand Institute of Economic Research, Wellington.

SCNPMGTE (Steering Committee on National Performance Monitoring of Government Trading Enterprises) 1996, *Government Trading*

Enterprises, Performance Indicators 1991-92 to 1995-96, Industry Commission, Melbourne.

Sharp, J. (Minister for Transport and Regional Development) 1997, Shipping and waterfront reform, Address to Mallesons Stephen Jaques Maritime Dinner, Sydney, 15 September.

Sheridan, T. 1994, 'Australian wharfies 1943–1967: casual attitudes, militant leadership and workplace change,' *Journal of Industrial Relations*, June, pp. 258–84.

Sloan, J. and Robertson, F. 1997, *Selected Analysis of Employment Conditions of Workers in the Australian Waterfront and Seafaring*, Working paper 145, National Institute of Labour Studies, Adelaide.

Smithwick, D. 1995, *Business Development in Australian Ports*, Port Strategy to 2000 Conference, March.

Statistics New Zealand 1998, *Census 1996: Personal Income for the Population Resident in New Zealand*, online: http://www.stats.govt.nz /statsweb.nsf/7ae81123c49aecb6cc25638f000d6e42?OpenView], (cited 3 February 1998).

Sydney Ports Corporation 1996, *Annual Report 1995-96*, Sydney, New South Wales.

TCS (Thomson Clarke Shipping) 1997a, *International Benchmarking Study of the Australian Waterfront*, Part A Report, August, Melbourne.

—— 1997b, *International Benchmarking Study of the Australian Waterfront*, Part B Report, September, Melbourne.

TPC (Trade Practices Commission) 1992, *Port Leasing Policies*, Draft report, December, Canberra.

Trace, K. 1997, 'Promoting efficiency and contestability in Australia's ports,' *Agenda*, vol. 4, no. 2, pp. 143–54.

Trinca, H. 1997, 'Waterfront parties negotiate over work practices,' *Sydney Morning Herald*, 27 September, p. 3.

Trompenaars, F. 1993, *Riding the Waves of Culture: Understanding Cultural Diversity in Business*, Economist Books, London.

Vasey, G. 1997, Post capital expansion and labour market reform, Paper presented at the Waterfront Reform Conference, Sydney, 13 March.

Way, N. 'Management finds itself with questions to answer', *Age*, 13 February, p. 4.

WIRA (Waterfront Industry Reform Authority) 1992, *Final Report*, AGPS, Canberra.

—— 1989, *In-Principle Agreement*, AGPS, Canberra.

Womack, J.P., Jones, D.T. and Roos, D. 1990, *The Machine that Changed the World*, Maxwell Macmillan International, Sydney.

Wooden M. and Robertson, F. 1997, *Determinants of Work-related Injuries: An Inter-industry Analysis*, Working paper 144, National Institute of Labour Studies, Adelaide.

Worksafe 1996, *Compendium of Workers' Compensation Statistics, Australia, 1994-95*, AGPS, Canberra.